

**UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF MISSOURI**

Michael Kendrick, individually and as
Administrator of the Estate of
Jonathan M. Kendrick, and on behalf of
all others similarly situated,

Plaintiff,

v.

AW Distributing, Inc.,
AW Product Sales & Marketing, Inc.,
Norazza, Inc.,
Technical Chemical Co.,
Micro Electronics, Inc.,
Micro Center Sales Corporation,
International Product Sourcing Group, Inc.,
The ODP Corporation,
ODP Business Solutions, LLC
Office Depot, LLC,
Walmart, Inc.,
Wal-Mart Stores East, L.P., and
Wal-Mart Stores East, L.L.C.

Defendants.

Case No. __-cv-__

CLASS ACTION COMPLAINT

DEMAND FOR JURY TRIAL

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Plaintiff Michael Kendrick, individually and as Administrator of the Estate of Jonathan M. Kendrick and on behalf of all others similarly situated, for his complaint against AW Distributing, Inc., AW Product Sales & Marketing, Inc. (collectively “AW” or “AW Defendants”); Norazza, Inc. (“Norazza”); Technical Chemical Co.; Micro Electronics, Inc., Micro Center Sales Corporation, International Product Sourcing Group, Inc. (collectively “Micro Center” or “Micro Center Defendants”); The ODP Corporation, ODP Business Solutions, LLC, Office Depot, LLC (collectively “Office Depot” or “Office Depot Defendants”); Walmart, Inc., Wal-Mart Stores East, L.P., and Wal-Mart Stores East, L.L.C. (collectively “Walmart” or “Walmart Defendants”) alleges as follows:

I. INTRODUCTION

1. Inhalant abuse is a rampant yet underreported public health crisis in the United States. A recent national survey found that 2.4 million people aged 12 and over reported using inhalants in 2020 alone. Of these individuals, 215,000 are estimated to have an inhalant abuse disorder.¹ Yet, inhalant abuse has been termed “the forgotten epidemic.”²

2. Inhalants are extremely toxic to the human body and can have profound effects on the nervous system and other organs.³ Scientific research has shown that prolonged use can cause neurological damage, resulting in cognitive abnormalities and permanent brain damage.⁴ Chronic

¹ SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION, Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health, at 16, 27–29 and Table A.26B, available at www.samhsa.gov/data. See also, NATIONAL INSTITUTE ON DRUG ABUSE, How Are Inhalants Used?, Apr. 13, 2020, at 4.

² Carter Sherman, *Inhalants – The Easy to Acquire but Deadly Drug That Nobody Talks About*, HOUSTON PRESS, Sept. 6, 2016, at 3.

³ NATIONAL INSTITUTE ON DRUG ABUSE, What are the Other Medical Consequences of Inhalant Abuse?, May 20, 2022, at 8–10, <https://nida.nih.gov/publications/research-reports/inhalants/what-are-other-medical-consequences-inhalant-abuse>.

⁴ *Id.*

exposure to these toxins can also cause damage to other organs and bodily systems, particularly to the heart, lungs, liver, and kidneys.⁵

3. Despite carrying such extreme physiological risks, including death, the chemicals used in some categories of inhalants would seem innocuous to the average person. They may be colorless, odorless, and tasteless. Yet looks can be deceiving. These are highly addictive substances that can cause catastrophic injury, including brain damage or death, even to a first-time user.

4. Moreover, inhalants are relatively inexpensive to manufacture and thus highly accessible as a means to get intoxicated. Gram for gram, inhalants may be the cheapest, easiest, and one of the fastest ways for a user to get “high,” and these products can be purchased—in bulk—at the local hardware store, office supply store, grocery store or, in some cases, even the gas station.

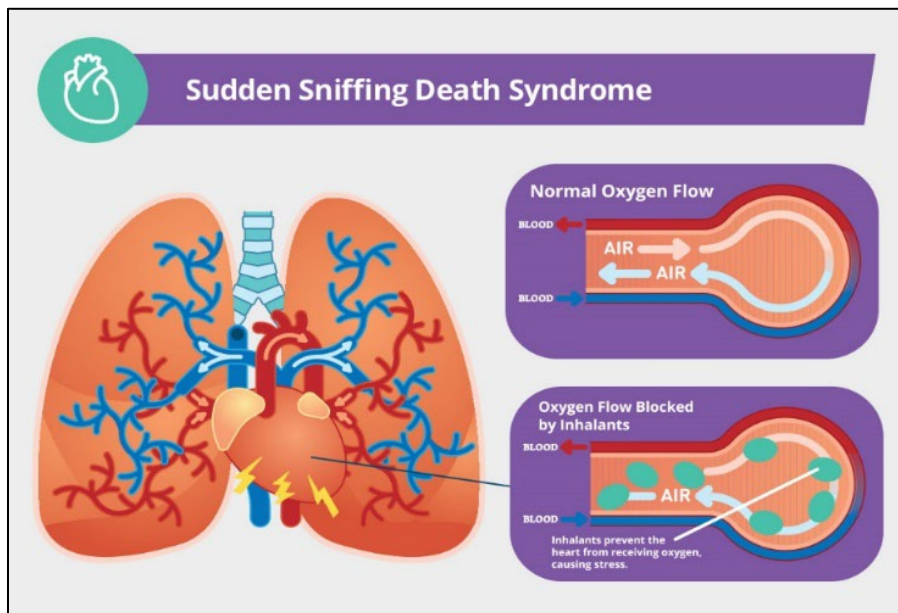
5. The most common cause of death from inhalants is cardiac arrest.

6. Inhalants cause the heart to beat at an abnormal rate, known as cardiac arrhythmia, which also increases the heart’s sensitivity to the hormone adrenaline. The body releases adrenaline as a response to stress. For a person intoxicated on inhalants, any sudden rush of fear, excitement, or surprise could result in cardiac arrest.⁶

⁵ *Id.*

⁶ R.T. Shepherd, *Mechanism of Sudden Death Associated with Volatile Substance Abuse*, 8 HUMAN TOXICOLOGY 287, 287–91 (1989). *See also About Inhalants*, 7(2) PAEDIATRICS & CHILD HEALTH 93, 93–94 (2002), available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2794702/#:~:text=Cardiac%20arrest%20%E2%80%93Chemicals,to%20inhalant%20abuse>.

7. Another common cause of death from inhaling is known as Sudden Sniffing Death Syndrome, which occurs when the gas component of aerosol blocks the body's normal flow of oxygen, also leading to cardiac arrest.⁷



8. Intentional inhalation or “huffing” also contributes to motor vehicle accidents and drownings due to the user being intoxicated while driving or being near water while using inhalants.⁸

9. Computer dusters are one of the most accessible and frequently abused inhalants. Dusters are composed almost entirely of 1-1, Difluoroethane (“DFE”), an odorless gas listed as HFC-152a. When inhaled, DFE causes intense and immediate intoxication. The intoxication is short-lived and undetectable in workplace drug tests, which makes dusters a prime target for abuse.

⁷ DRUGREHAB.COM, *Sudden Sniffing Death Syndrome*, www.drugrehab.com/addiction/drugs/inhalants/sudden-sniffing-death-syndrome/.

⁸ Janet F. Williams, et al., *Inhalant Abuse*, 119 J. AM. ACAD. OF PEDIATRICS. 1009, 1009–17 (2007), available at www.pediatrics.org/cgi/doi/10.1542/peds.2007-0470.

Intentionally inhaling DFE also results in a loss of motor control and impaired judgment, leading to numerous accidents and deaths.

10. Dusters are cheap and readily available at most big-box and small retailers. Defendants are manufacturers who dominate the U.S. retail duster market. Upon information and belief, they are responsible for selling over **20 million DFE dusters every year**—the bulk of which are sold to individuals seeking to get high, thus feeding a growing public health crisis. Industry sales are estimated to be over \$160 million per year.

11. During the relevant time period, Defendants' computer dusters cost as little as \$1.89 per can. All are available in multipacks and do not feature warnings about inhalant addiction or guidance to prevent inhalant abuse. Defendants have worked to ensure that dusters continue to be sold without regard to a purchaser's age and without restriction on the number of cans purchased.

12. AW designs, manufactures, tests, labels, markets, and distributes Ultra Duster. Ultra Duster is AW's trademark brand name.



13. AW also private labels Ultra Duster on behalf of third parties. AW contracts with these third parties and, according to its website, places the third-party company's name on cans of Ultra Duster or redesigns the Ultra Duster cans to reflect the third-party company's name or logo.

Among the third-party brands that AW manufactures are Innovera and the Office Depot duster. These dusters are identical in composition to Ultra Duster.



14. Office Depot contracts with AW to private label the Office Depot brand duster, sold exclusively through Office Depot stores or via its website. The Office Depot private-label product uses Office Depot Defendants' marks. On the Office Depot website, Office Depot Defendants list the manufacturer of the product as Office Depot.

→ officedepot.com/a/products/911245/Office-Depot-Brand-Cleaning-Duster-10/#Specs	
Specs	
Item #	911245
Manufacturer #	OD15210/3-245
Quantity	3
Size (Container)	10 oz
Cleaner Use	Professional
Product Line	Cleaning Dusters
Brand Name	Office Depot
Distributed By	Veyer, LLC
Manufacturer	OFFICE DEPOT
Total Quantity	30 oz

15. Norazza designs, manufactures, tests, labels, markets, and distributes Endust. Similar to AW, Norazza also private labels its flagship brand Endust on behalf of third parties. Among the third-party brands Norazza manufactures is Surf onn. (also referred to as “Onn.”), a duster privately labeled exclusively for Walmart. This duster is identical in composition to Endust.



16. AW previously private labeled Surf onn. for Walmart. The composition of the can, the can design, and the purported warnings on the can are virtually the same despite Walmart transitioning from AW to Norazza as its private-label partner.

17. Walmart has contracted with Norazza, AW, and Technical Chemical Company to manufacture the Surf onn. DFE-based dusters, which are sold exclusively as its private-label brand in Walmart stores or on Walmart’s website. The label of the Onn. duster product does not include a manufacturer but includes Walmart marks and contact information.



18. Micro Center Defendants design, manufacture, test, label, market, and distribute the Inland Air Duster. Inland is Micro Center's trademark brand name, and it is sold exclusively in Micro Center stores or on Micro Center's website. Micro Center is listed on the Inland Air Duster as the purported manufacturer or supplier, and is listed as the source for technical support related to the duster.

19. Each of the computer dusters are identical in composition—all are composed almost entirely of DFE and contain a trace amount of a bitterant known as denatonium benzoate ("DB").

20. Defendants have known for decades of the foreseeable danger with its duster products. Rather than fix the defective design and adequately warn of foreseeable dangers, Defendants instead exploited a vulnerable population for their own gain. They are complicit in creating the public health crisis of inhalant abuse. Defendants are aware of the extremely addictive nature of DFE yet continue to promote these cheap computer dusters for easy consumption by individuals addicted to DFE who frequent stores, again and again, purchasing multipacks on each visit.



21. Defendants fail to provide a warning that intentionally inhaling DFE is extremely addictive, which increases the risk of injury and death to inhalant users. And they falsely warrant that a bitterant is added which will help deter inhalant abuse.

22. When Defendants started to receive pushback in the early 2000s related to the injuries and deaths from their products, Defendants began to include the bitterant denatonium benzoate (“DB”) in their cans of computer duster to forestall inquiry. Indeed, the Walmart Defendants specifically began requiring the addition of bitterant to the product due to the increased intentional inhalation of duster products. However, the inclusion of DB—and Defendants’ representations that the bitterant deters abuse—is misleading, deceptive, fraudulent, and unreasonably dangerous for multiple reasons.

23. First, by design, in the manner and quantity in which it is added to computer dusters, DB has no meaningful impact because it is undetectable in the gas vapor phase. And, even if added in the quantity stated in patents, it would never trigger an actual deterrent effect upon intentional inhalation. To date, no scientific report provides evidence that DB deters inhalant abuse.

24. As evidence of the failure of DB as a deterrent, injuries and deaths related to intentional inhalation have increased exponentially since the addition of the bitterant to these cans.⁹

25. Second, Defendants are aware that DB is among a class of bitter substances, including saccharin, that a significant portion of the population cannot detect. Namely 15–30% of the adult population has a genetic trait which renders them incapable of detecting the bitter taste

⁹ Mathias B. Forrester, *Computer and Electronic Duster Spray Inhalation (Huffing) Injuries Managed at Emergency Departments*, 46 AM. J. DRUG ALCOHOL ABUSE 180, 180–83 (2020).

of certain molecules.¹⁰ Defendants fail to provide a warning that its bitterant could be undetectable in intentional inhalation scenarios.

26. Finally, and perhaps most damning to Defendants' promises regarding the deterrent effect of the bitterant, DB is a bronchodilator which relaxes muscles in the lungs and widens the inhalant abuser's airways. As a result, DB **increases** the amount of DFE which the inhalant abuser might otherwise absorb into their lungs while intentionally inhaling. This operates to make intentionally inhaling the duster even riskier and more dangerous than it otherwise would be absent the bitterant.¹¹

27. Defendants knew that: (1) DFE is extremely addictive and required a warning of its addictive nature due to the foreseeable use of the product for intentional inhalation, (2) the addition of DB did not deter the foreseeable intentional inhalation, (3) a significant portion of the population cannot taste DB in any quantity, and (4) the inclusion of DB in any amount presented a greater risk to foreseeable intentional inhalation.

28. Yet, despite these known problems with DB, Defendants warrant on each of their duster cans that the added bitterant will help to deter or discourage inhalant abuse, as shown in the images below. This warranty is false, intentionally misleading, and increases the danger to consumers.

¹⁰ U.S. CONSUMER PROD. SAFETY COMM'N, FINAL REPORT: STUDY OF AVERSIVE AGENTS 18 (1992).

¹¹ Brian E. Perron, et al., *Potentially Serious Consequences for the Use of Bitrex as a Deterrent for the Intentional Inhalation of Computer Duster Sprays*, 39 FORENSIC TOXICOLOGY 286 (2021), available at <http://link.springer.com/10.1007/s11419-020-00559-2>.

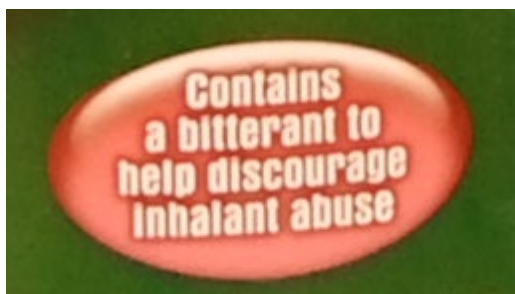


Figure 1 – Ultra Duster Warranty



Figure 2 – Dust-Off Warranty



Figure 3 – Endust Warranty



Figure 4 – Inland Warranty

29. Defendants' labels are inadequate for multiple reasons including insufficient warnings on some foreseeable dangers and non-existent warnings for other foreseeable dangers. Despite the ineffectiveness of the bitterant and the dangers of DFE, Defendants provide express assurances that DB will "discourage inhalant abuse." Defendants only provide minimal, general warnings that abuse of the products "may be harmful" or "fatal," which Defendants then cancel out by reassuring consumers that their products were designed to prevent abuse. Defendants' products also do not provide any express warnings on addiction and the specific injuries that can result from intentional inhalation.

30. When an individual passes away from cardiac arrest or Sudden Sniffing Death Syndrome attributed to intentional inhalation their official cause of death is generally termed "difluoroethane toxicity." Jonathan Kendrick was found dead at the Motel 6 at 6850 W. 108th St., Overland Park, Johnson County, Kansas with 35 cans of Inland Air Duster, Office Depot duster, and Surf onn. duster near his body. He had used each of the brands leading up to his death. His official cause of death was "acute 1,1-Difluoroethane toxicity."

31. Prior to his death, Jonathan had developed an addiction to the DFE in Defendants' products and routinely used products manufactured by each of the Defendants. He visited various retailers on a weekly and sometimes daily basis to feed his addiction. Thus, each Defendant caused his deadly addiction, injuries, and subsequent death.

32. Jonathan's death, and the deaths of many others, could have been avoided had Defendants not negligently and defectively designed, tested, labeled, marketed, and distributed their duster products.

II. PARTIES

33. Plaintiff Michael Kendrick is an adult resident citizen of Johnson County, Kansas. Plaintiff is decedent Jonathan Kendrick's father, legal heir, and Administrator of Jonathan's estate.

Michael Kendrick is hereafter referred to as “Plaintiff” or “Plaintiff Kendrick.” Jonathan Kendrick was a citizen of Missouri at the time of his death and during all times while using Defendants’ products.

34. Defendant AW Distributing, Inc. (“AW Distributing”) is a California-registered corporation with its principal place of business at 204 E. 2nd Ave., Unit 343, San Mateo, California 94401. It may be served through its registered agent, Kennic Ho, at the same address.

35. Defendant AW Product Sales & Marketing, Inc. (“AW Product Sales”) is a California-registered corporation with its principal place of business at 204 E. 2nd Ave., Unit 343, San Mateo, California 94401. It may be served through its registered agent, Kennic Ho, at the same address.

36. However, in *Leet v. AW Distributing, Inc., et al.* Case No. 23-cv-02322-DDC-TJJ (D. Kan.), Plaintiffs attempted service at the address for the registered agents listed on AW Distributing’s and AW Product Sales’s official business listings with the California Secretary of State’s office. The address provided to the California Secretary of State was a mailbox at a UPS Store, and the UPS Store employee told Plaintiff’s private process server that neither Kennic Ho nor any affiliate of Defendants has had a mailbox at the store for at least three years. Accordingly, this address has not been a proper address for service of process of Kennic Ho or his businesses, AW Distributing and AW Product Sales, despite being listed as the address for both companies’ official registered agent, Kennic Ho, with the state in which they do business. AW Defendants were previously made aware of this deficiency last year in a related case, but they continue to improperly list the mailbox at the UPS Store on their official business filings as the address of their agent.

37. During relevant times of use, AW Defendants designed, manufactured, tested, labeled, marketed, distributed, and/or sold Ultra Duster and private-label versions of Ultra Duster,

including for Office Depot and Walmart (Surf onn. or Onn.), for sale and use in the United States including within the State of Missouri.

38. Defendant Norazza, Inc. is a New York corporation with its principal place of business at 3938 Broadway, Buffalo, New York 14227. During relevant times of use, Norazza designed, manufactured, tested, labeled, marketed, distributed, and/or sold Endust and private-label versions of Endust, including but not limited to Surf onn. or Onn. for Walmart, for sale and use in the United States including within the State of Missouri.

39. Defendant Technical Chemical Company has a principal place of business in Texas. During relevant times of use, Technical Chemical Company designed, manufactured, tested, labeled, marketed, distributed, and/or sold private label version computer dusters labeled Surf onn. or Onn. for Walmart, for sale and use in the United States including within the State of Missouri.

40. Defendant Micro Electronics, Inc. is a Delaware-registered corporation with its principal place of business at 4055 Leap Rd., Hilliard, Ohio 43026.

41. Defendant Micro Center Sales Corp. is a Delaware-registered corporation with its principal place of business located in Hilliard, Ohio. It is registered to do business in Missouri and may be served through its Missouri registered agent, National Registered Agents, Inc., 120 South Central Avenue, Clayton, MO 63105. Upon information and belief, Micro Electronics, Inc. is the parent corporation of Micro Center Sales Corp.

42. Defendant International Product Sourcing Group, Inc. is a Delaware-registered corporation with its principal place of business located in 4055 Leap Rd., Hilliard, Ohio.

43. Defendants Micro Electronics, Inc., Micro Center Sales Corp., and International Product Sourcing Group are collectively referred to as “Micro Center Defendants.” At all material and relevant times, the Micro Center Defendants designed, manufactured, tested, labeled,

marketed, distributed, and/or sold Inland Air Duster. The Micro Center Defendants offered Inland Air Duster for sale and use in the United States including within the State of Missouri.

44. The Micro Center Defendants never took steps to meaningfully restrict the availability of computer dusters in its store or track and monitor incidents involving computer dusters. Micro Center Defendants are able to track individual user purchases through personal accounts.

45. Defendant The ODP Corporation is a Delaware-registered corporation with its principal place of business at 6600 North Military Trail, Boca Raton, Florida 33496. Upon information and belief, The ODP Corporation is the parent corporation of ODP Business Solutions, LLC and Office Depot, LLC.

46. Defendant ODP Business Solutions, LLC is a Delaware-registered limited liability company with its principal place of business located in Boca Raton, Florida. It is registered to do business in Missouri and may be served through its Missouri registered agent, CT Corporation System, 120 South Central Avenue, Clayton, MO 63105.

47. Defendant Office Depot, LLC is a Delaware-registered limited liability company with its principal place of business located in Boca Raton, Florida. It is registered to do business in Missouri and may be served through its Missouri registered agent, CT Corporation System, 120 South Central Avenue, Clayton, MO 63105.

48. Defendants The ODP Corporation, ODP Business Solutions, LLC, and Office Depot, LLC are collectively referred to as the “Office Depot Defendants.” At all material and relevant times, the Office Depot Defendants designed, manufactured, tested, labeled, marketed, distributed, and/or sold of Office Depot brand duster. The Office Depot Defendants offered Office Depot dusters for sale and use in the United States including within the State of Missouri.

49. The Office Depot Defendants never took steps to meaningfully restrict the availability of computer dusters in its store or track and monitor incidents involving computer dusters. Indeed, to the contrary, Office Depot Defendants would frequently offer Jonathan Kendrick special, personalized “Instant Savings” deals on computer dusters of almost 25% off to encourage his purchase of their Office Depot private-labeled products further fueling his addiction, injuries, and ultimately death. The Office Depot Defendants are able to track individual user purchases through personal rewards accounts.

50. Defendant Walmart Inc. is a Delaware-registered corporation with its principal place of business located in Bentonville, Arkansas. Walmart, Inc. is registered to do business in Missouri and may be served through its registered agent, CT Corporation System, 120 South Central Avenue, Clayton, MO 63105.

51. Defendant Wal-Mart Stores East, L.P. is a Delaware-registered limited partnership with its principal place of business located in Bentonville, Arkansas. Wal-Mart Stores East, L.P. is registered to do business in Missouri and may be served through its Missouri registered agent, CT Corporation System, 120 South Central Avenue, Clayton, MO 63105.

52. Defendant Wal-Mart Stores East, L.L.C. is a Delaware limited liability company with its principal place of business located at 702 S.W. 8th St., Bentonville, Arkansas 72716.

53. Upon information and belief, Walmart Inc. is the parent corporation of Wal-Mart Stores East, L.P. and Wal-Mart Stores East, L.L.C. and all are collectively referred to as the “Walmart Defendants.” At all material and relevant times, the Walmart Defendants designed, manufactured, tested, labeled, marketed, distributed, and/or sold Onn. dusters. The Walmart Defendants offered Surf onn. dusters for sale and use in the United States including within the

State of Missouri. Walmart never took steps to meaningfully restrict the availability of computer dusters in its store or track and monitor incidents involving computer dusters.

III. JURISDICTION & VENUE

54. Subject Matter Jurisdiction. The Court has subject matter jurisdiction pursuant to 28 U.S.C. § 1332(d), because (1) the matter in controversy exceeds the sum or value of \$5,000,000, exclusive of interest and costs, (2) the action is a class action, (3) there are members of the Class who are diverse from Defendants, and (4) there are more than 100 class members. The Court also has subject matter jurisdiction pursuant to 28 U.S.C. § 1332(a) and (c), because the amount in controversy exceeds \$75,000, exclusive of interest and costs, and Plaintiff is diverse from Defendants.

55. Personal Jurisdiction. The Court has personal jurisdiction over AW, Falcon, Norazza, Technical Chemical Company, the Micro Center Defendants, the Office Depot Defendants, and the Walmart Defendants because Defendants are registered to do business in the State of Missouri, regularly conduct business in the State of Missouri, sold their computer dusters in the State of Missouri, and/or actively sought to serve the market for their computer duster products in the State of Missouri. All of the Defendants designed, marketed, manufactured, tested, labeled, and distributed their duster products for nationwide sale and consumption including to some of the largest national retailers—none sought to avoid distribution and sale in Missouri. Each sold millions of duster cans every year including large numbers in Missouri. In addition, Defendants committed tortious acts in the State of Missouri and Plaintiff's claims arise out of such acts, and/or because each of the Defendants otherwise made or established contacts in the State of Missouri sufficient to permit the exercise of personal jurisdiction.

56. Venue. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391 because a substantial part of the events giving rise to the claims in this action occurred in this judicial

district, namely Defendants sold their respective computer dusters through representatives and resellers located in this judicial district, Jonathan and the other decedents whose deaths give rise to the claims in this action purchased computer dusters from representatives and resellers located in this judicial district, and Jonathan resided in this judicial district at the time of his death and intended to continue residing in this judicial district. Further, Defendants through their representatives and resellers, marketed, distributed, and sold their respective computer dusters—which were essentially identical in all material respects—to millions of consumers across the United States, including in the Western District of Missouri.

IV. FACTS

A. Jonathan Kendrick's death

57. Jonathan began intentionally inhaling computer duster in approximately 2011 after being introduced to the immediate and intense intoxication from intentionally inhaling DFE. Inhalant abuse quickly took over Jonathan's life.

58. Despite struggling with addiction to duster, Jonathan was a promising young chef who had been a culinary student and had many years of experience in the food service industry. Ultimately, Jonathan's addiction spiraled out of control and kept him from pursuing his culinary and other goals.

59. On the day of his death, he rented a hotel room near a Super Walmart where he had purchased numerous cans of Surf onn. to feed his addiction. He had also purchased numerous cans of Office Depot private-labeled duster and Micro Center's private-labeled Inland Air Duster. All three types of cans were found at the scene of his death. In total, 35 cans were found in his room of which 27 were empty.

60. Jonathan was known to use Surf Onn., Office Depot, Inland, and Ultra Duster computer duster products among other brands.

61. Each of these dusters contributed to his addiction to DFE, injuries, and subsequent death.

62. Jonathan passed away on September 25, 2022, in Room 143 at the Motel 6 in Overland Park, Johnson County, Kansas. His death certificate lists “acute 1,1-Difluoroethane toxicity” as his cause of death. He was 37 years old. He left behind grieving parents, Michael and Deborah Kendrick, and one sister, Kristen.

B. The emergence of computer dusters as the most commonly abused inhalant—the data reveals a public health crisis

1. The National Survey on Drug Use and Health

63. Jonathan is not alone. The National Survey on Drug Use and Health (“NSDUH”), administered annually by the Substance Abuse and Mental Health Services Administration, found that 678,000 Americans initiated inhalant use in 2020.¹² Inhalants outpaced cocaine, sedatives, methamphetamine, and heroin as the choice of substance for first-time abuse.¹³

64. This statistic is not surprising considering that cocaine, methamphetamine, and heroin are illegal and sedatives are a controlled substance, while most inhalants are neither illegal nor controlled. Computer dusters, in particular, are inexpensive, readily available, and there are no controls on frequency of purchase or number of cans per purchase.

¹² NSDUH is an authoritative source for epidemiological data on tobacco, alcohol, and drug use; mental health; and other health-related issues in the U.S. This survey is conducted in all 50 states and in the District of Columbia. *See* SUBSTANCE ABUSE & MENTAL HEALTH SERVICES ADMINISTRATION, U.S. DEPT. HEALTH & HUMAN SERVICES, Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health, 25 (Oct. 2021).

¹³ *Id.* at 23–25.

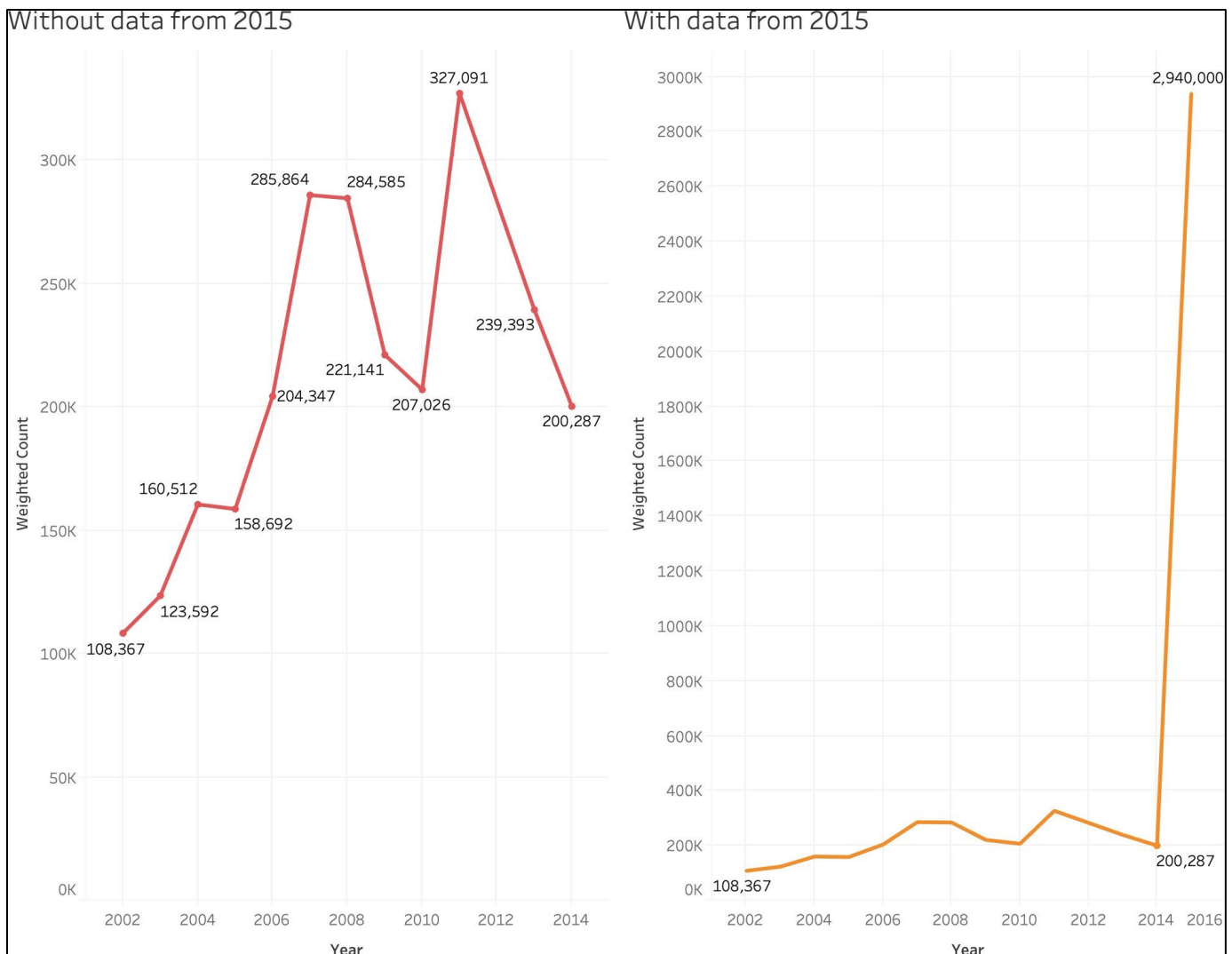
65. In terms of overall inhalant use, the 2020 NSDUH found that among those individuals aged 12 or older, 2.4 million people used inhalants.¹⁴ This figure is up 400,000 from the 2018 National Survey, representing *a 20% increase over a two-year period*.¹⁵

66. NSDUH did not include dusters as a discrete inhalant type in its survey until 2015. Prior to 2015, the survey only asked if individuals had abused any “other” products and relied upon the individual to recall computer dusters. When individuals were specifically asked whether they had abused computer dusters, a more accurate picture of intentional inhalation emerged—an exponential increase compared to the prior method of estimating. As shown below, including dusters in the “other” category resulted in grossly underestimating the prevalence of intentional inhalation of computer dusters.¹⁶

¹⁴ *Id.* at 16.

¹⁵ *Id.* at 17.

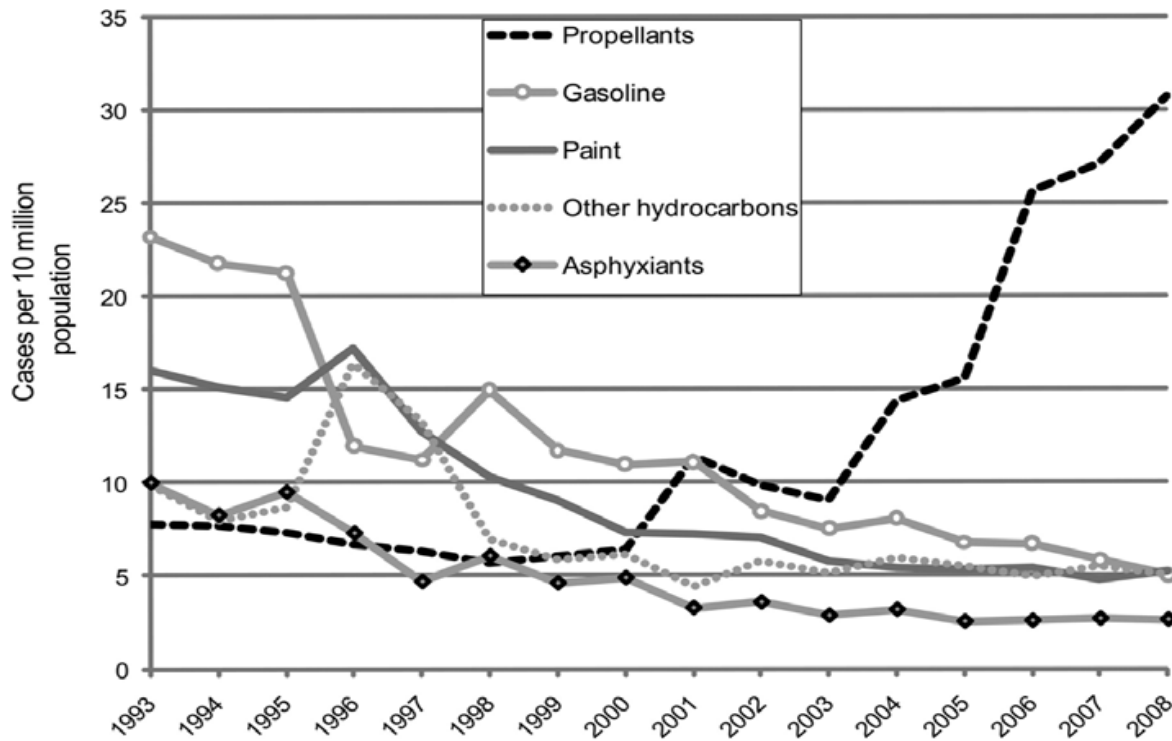
¹⁶ See NSDUH, <https://nsduhweb.rti.org/respweb/homepage.cfm>.



2. The National Poison Data System

67. Data from the National Poison Data System (“NPDS”) of the National Poison Control Center also shows alarming increases in duster use and resulting injury or death. A scientific study published in 2010 in the American Academy of Pediatrics found that while some types of inhalant use—such as sniffing gasoline or paint—have been declining since 1993, use of propellants like dusters has skyrocketed since 2003.¹⁷

¹⁷ Melinda R. Marsolek, Nicole C. White, & Toby Litovitz, *Inhalant Abuse: Monitoring Trends by Using Poison Control Data*, 125 PEDIATRICS 906, 906-913 (May 2010), available at <https://publications.aap.org/pediatrics/article-abstract/125/5/906/72520/Inhalant-Abuse-Monitoring-Trends-by-Using-Poison?redirectedFrom=fulltext>.



68. NPDS is a data warehouse for 55 poison control centers across the U.S. The results from this study involved human cases with an exposure route of inhalation with intentional use as a reason. Intentional use was defined as “an exposure resulting from the intentional, improper or incorrect use of a substance where the victim was likely attempting to achieve a euphoric or psychotropic effect.”¹⁸

69. An expert review of the NPDS data found that for the period of 1993 through 2008, the overall number of inhalant-related calls to poison control decreased by 33%. Yet, while there was a general decline in inhalant use overall, there was a significant increase in use of propellants, with computer dusters being far and away the most commonly used propellant.¹⁹

¹⁸ *Id.*

¹⁹ *Id.*

70. To further illustrate the emergence of computer dusters as the drug of choice for inhalant users, Melinda Marsolek and her colleagues provided a breakdown of the 25 most frequently implicated inhalant products. According to this research, computer dusters ranked the 7th most fatal inhalant product, ranked 3rd by all major effects, 4th by death, and 8th on the overall hazard index.²⁰

The 25 Most Frequently Implicated Products Ranked According to Fatality Rate for All Single-Substance Cases

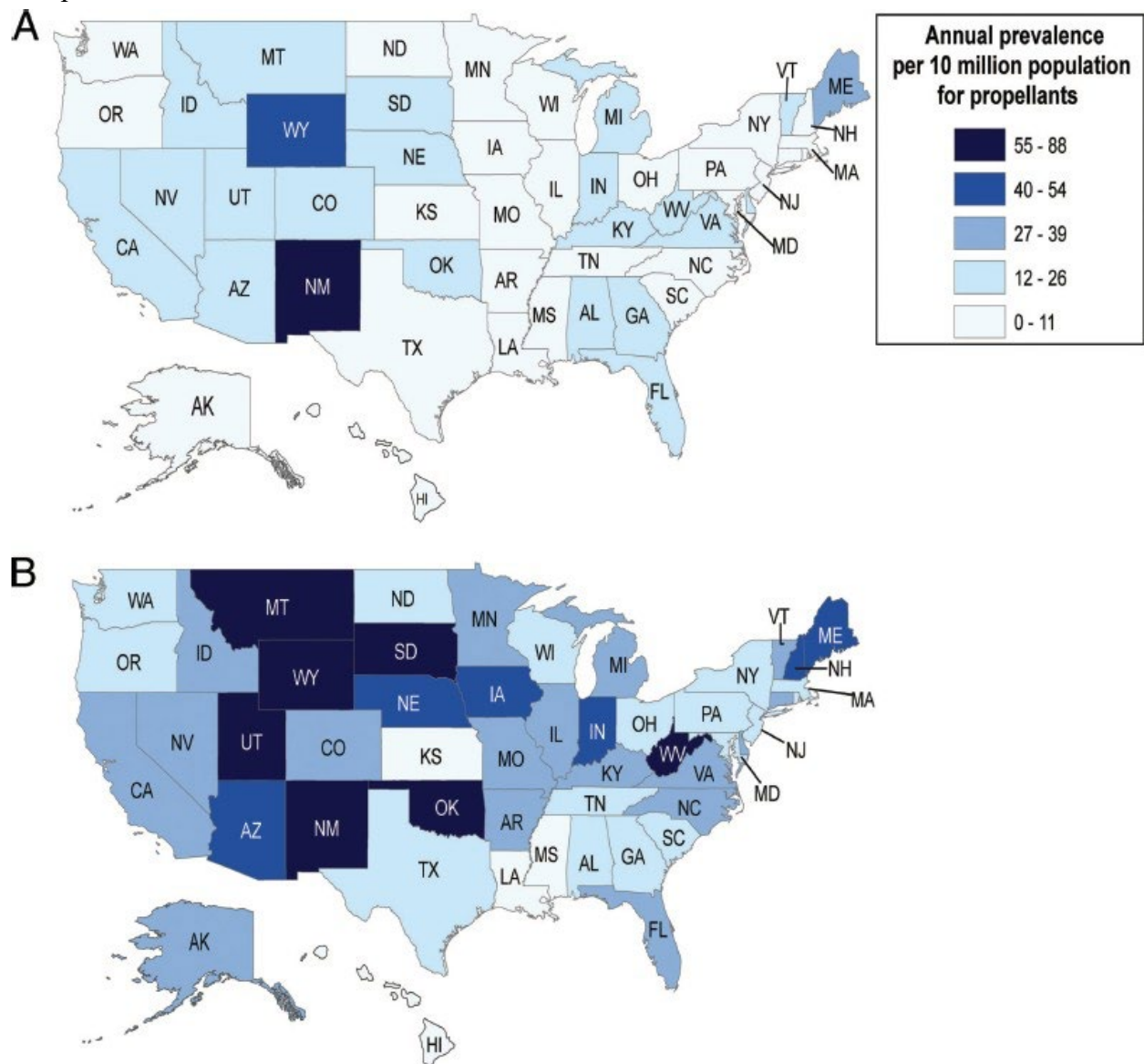
Product	All	Major Effects	Deaths	Hazard Index ^a	Fatality Rate ^b
All substances	30 094	705	167	29.0	5.5
Butane	620	19	36	88.7	58.1
Propane	270	9	7	59.3	25.9
Air fresheners	1239	22	27	39.5	21.8
Nitrous oxide	731	18	10	38.3	13.7
Carburetor cleaners	582	43	5	82.5	8.6
Fluorocarbons/freon	1631	59	14	44.8	8.6
Dusters	2457	69	13	33.4	5.3
Nitrites/nitrates	431	16	2	41.8	4.6
Toluene/xylene	1096	48	5	48.4	4.6
Adhesive/glue	1105	18	4	19.9	3.6
Hair spray	279	2	1	10.8	3.6
Disinfectants	347	4	1	14.4	2.9
Polishes/waxes	350	5	1	17.1	2.9
Paint thinner	458	14	1	32.8	2.2
Typewriter correction fluid	566	4	1	8.8	1.8
Paint	3036	80	5	28.0	1.6
Gasoline	4329	72	7	18.2	1.6
Helium	689	9	1	14.5	1.5
Formalin/formaldehyde	197	6	0	30.5	0.0
Deodorant	302	3	0	9.9	0.0
Ethanol (nonbeverage)	233	2	0	8.6	0.0
Albuterol	415	1	0	2.4	0.0
Marker/ink	419	1	0	2.4	0.0
Nail polish remover	182	0	0	0.0	0.0
Nail polish	160	0	0	0.0	0.0

^a The hazard index was calculated as the number of cases that resulted in major effects or death per 1000 cases.

^b The fatality rate was calculated as the number of cases that resulted in death per 1000 cases.

²⁰ *Id.*

71. Another notable finding by Marsolek's study was the change in prevalence of propellants over four years by state—from 2002-2004 to 2006-2008. The data broken down by state showed a **300% increase in total calls** regarding propellants from 2003 to 2008. 47 states reported an increase, 14 states reported an exponential increase, and no states reported a decrease in total number of calls. And, again, the vast majority of these calls were attributed to use of computer duster.²¹



Change in prevalence of propellant cases according to state, A, 2002–2004 vs B, 2006–2008.

²¹ *Id.*

72. Importantly, this data does not capture the full scope of computer duster use as some addicts seek treatment at acute care facilities, may die from cardiac arrest or Sudden Sniffing Death Syndrome, or forego treatment.

3. The National Electronic Injury Surveillance System

73. Data from the National Electronic Injury Surveillance System (“NEISS”) is another resource which proves that the frequency of intentional inhalation has increased to the point of becoming a public health crisis.

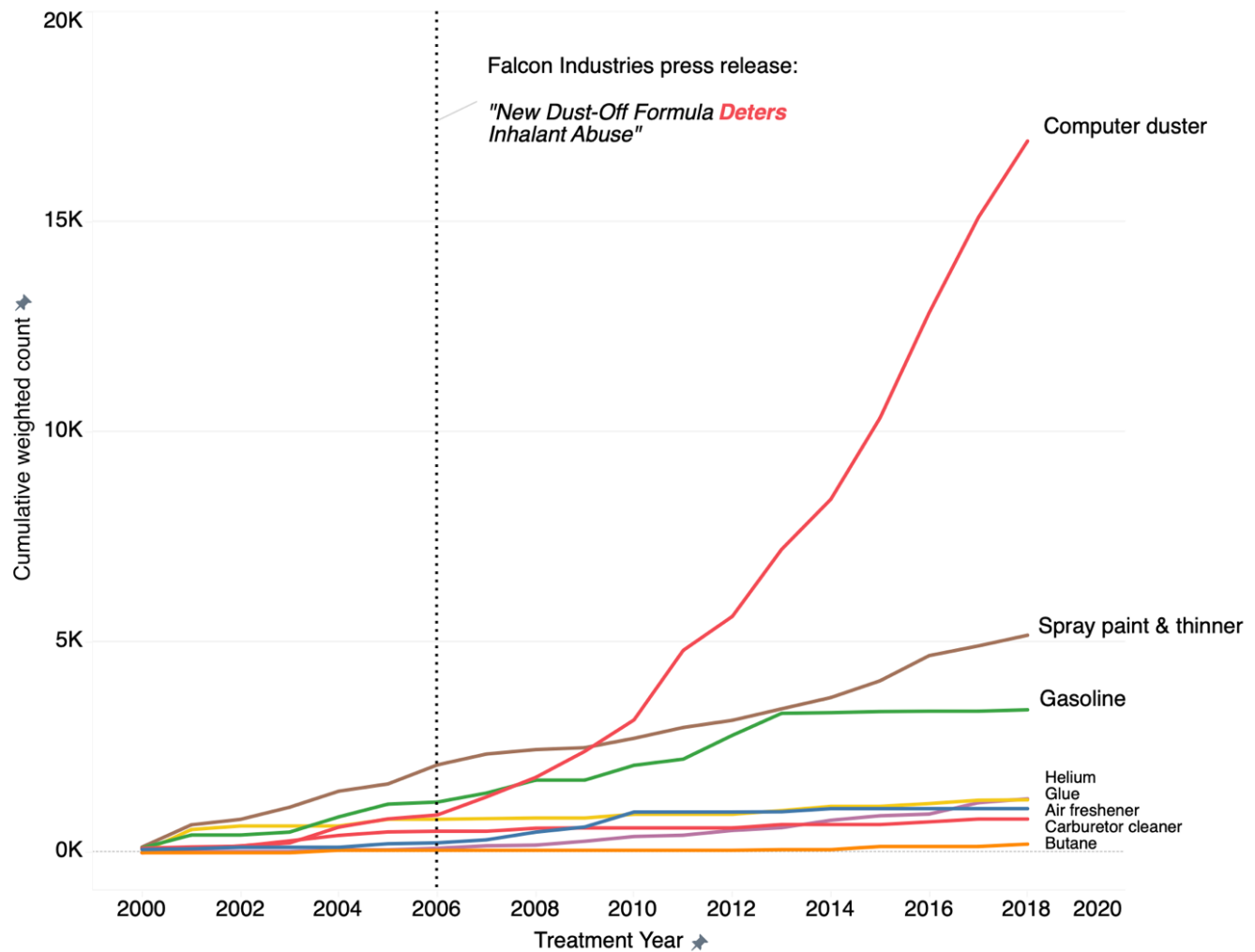
74. NEISS is a database maintained by the U.S. Consumer Product Safety Commission which catalogs injuries treated at a broad sampling of 100 hospital emergency departments which have at least 6 beds and 24-hour emergency care. Experienced coders review this data from emergency room (“ER”) visits and enter demographic, injury, and treatment information into the NEISS database.²² This database represents the core of the CPSC’s Bureau of Epidemiology. A 2020 study by Mathias Forrester, published in the American Journal of Drug and Alcohol Abuse, used data from NEISS to estimate the number of ER visits due to use of dusters for the period 2001-2017.²³ Brian E. Perron, PhD, a Professor at the University of Michigan, updated Forrester’s findings through 2018 and included other inhalant types for comparison. The data shows that computer dusters account for more visits than all other categories of inhalants combined.

²² U.S. CONSUMER PROD. SAFETY COMM’N, *National Electronic Injury Surveillance System (NEISS)*, <https://www.cpsc.gov/es/Research--Statistics/NEISS-Injury-Data>.

²³ Forrester, *supra* note 9, at 180–83.

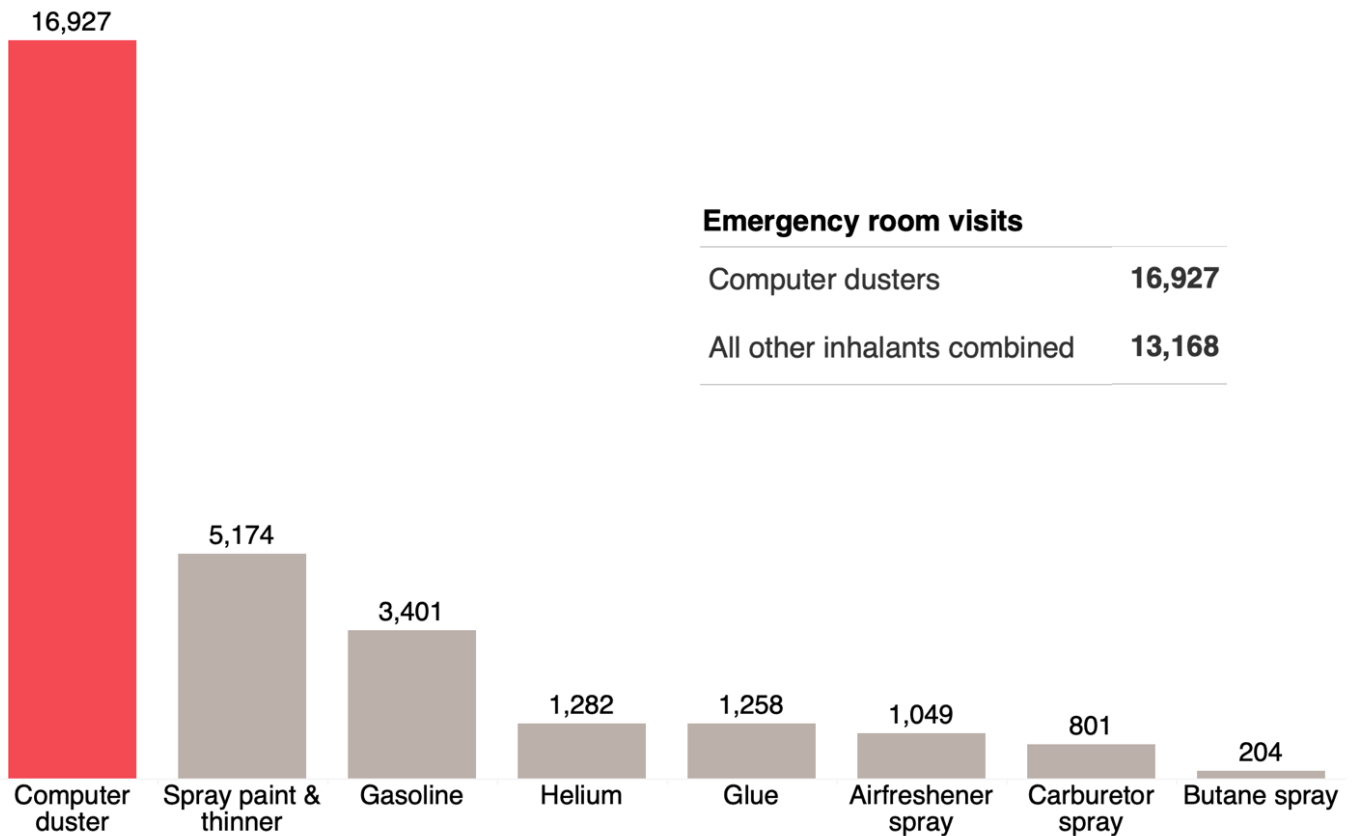
Cumulative count of emergency room visits due to inhalant abuse

National Electronic Injury Surveillance System (2000-2018)



75. Overall, according to the analysis of NEISS records by Dr. Perron and Mr. Forrester, computer dusters accounted for more ER visits than any other inhalant on an annual basis from 2011-2018.²⁴ Specifically, dusters account for 16,927 out of a total of 30,095 inhalant-related ER visits—56.2% of all inhalant-related ER visits.

Abuse of computer duster sprays account for more emergency room visits than all other inhalant types combined



²⁴ *Id.*

4. Though Curated for the Benefit of Computer Duster Manufacturers, Media Reports Collected and Posted by the Alliance for Consumer Education Further Demonstrate the Scope of the Intentional Inhalation Problem

76. The Alliance for Consumer Education (“ACE”) is a non-profit organization which was formed in 2000 by the Household and Commercial Products Association,²⁵ a trade organization heavily supported by several of the Defendants.²⁶

77. ACE operates as a clearinghouse for media reports concerning inhalation abuse and purports to offer common sense suggestions to prevent inhalant abuse.²⁷ For example, ACE offers a tool kit including an inhalant abuse quiz and lesson plan for teachers about the dangers of inhalant abuse.²⁸

78. While ACE does report some data on the prevalence of inhalant abuse, its website makes no effort to track deaths attributed to intentionally inhaling computer dusters. Indeed, its website states: “[T]he number of lives claimed by inhalant abuse each year is unknown because these deaths often are attributed to other causes.”²⁹ ACE makes no mention of the fact that acute 1,1-Difluoroethane intoxication is a cause of death specifically due to intentionally inhaling DFE,

²⁵ ACE, *Mission*, <http://consumered.org/about> [<https://web.archive.org/web/20240709133433/https://www.consumered.org/about>].

²⁶ ACE, *2017 Digital Annual Report*, <https://www.consumered.org/sites/default/files/20180821%20ACE%20Annual%20Report%20Page%20WEB.pdf> [<https://web.archive.org/web/20240801134406/http://consumered.org/sites/default/files/20180821%20ACE%20Annual%20Report%20Page%20WEB.pdf>].

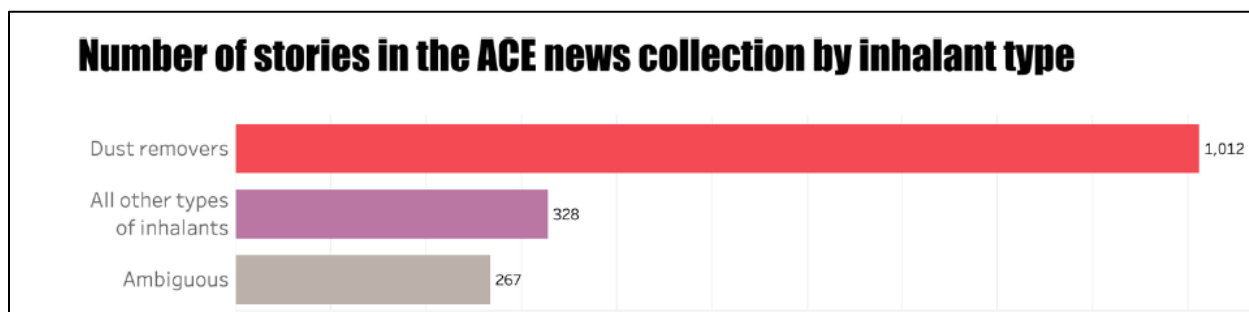
²⁷ See ACE, <https://www.consumered.org/> [<https://web.archive.org/web/20240729031629/http://www.consumered.org/>].

²⁸ ACE, *Teaching Resources*, <https://www.consumered.org/programs/inhalant-abuse-prevention/teaching-resources> [<https://web.archive.org/web/20240226194217/https://www.consumered.org/programs/inhalant-abuse-prevention/teaching-resources>].

²⁹ ACE, *Data & Research*, <https://www.consumered.org/programs/inhalant-abuse-prevention/data-research> [<https://web.archive.org/web/20240227202325/https://www.consumered.org/programs/inhalant-abuse-prevention/data-research>].

or that data tracking the number of annual deaths from this particular category is available upon request to individual medical examiners' offices.

79. Nonetheless, ACE—the industry trade group—has repeatedly acknowledged media reports and press information demonstrating that intentionally inhaling DFE is addictive and is a foreseeable use of computer dusters. Specifically, Brian E. Perron, PhD, analyzed the reports available on ACE's website through 2020 and found 1,012 reports of inhalant abuse attributed to computer dusters. This number far exceeded the reports attributed to all other types of inhalants combined.



5. Locally enacted bans on sales of computer duster

80. Issues related to intentional inhalation have also led to local bans on the sale of dusters. Specifically, the small town of Bald Knob, Arkansas, population approximately 3,000, passed an ordinance in late 2020 banning the sale of computer dusters within city limits.³⁰

³⁰ Greg Geary, *Bald Knob Council Approves Banning Sale of Air Duster if City Legally Can*, WHITE CNTY. CITIZEN (Oct. 12, 2020), https://www.thedailycitizen.com/news/bald-knob-council-approves-banning-sale-of-air-duster-if-city-legally-can/article_ae0ccf7d-6f38-5474-8399-d7df401415d2.html?utm_medium=social&utm_source=email&utm_campaign=user-share. See also Greg Geary, *Bald Knob Council Goes Through with Ban on Sale of Air Duster Products*, WHITE CNTY. CITIZEN, https://www.thedailycitizen.com/news/bald-knob-goes-through-with-ban-on-sale-of-air-duster-products/article_3ed7df37-1a25-5146-9204-19d9fd19flee.html (last updated Dec. 7, 2020).

81. Police Chief Larry House reported that prior to the ban, the police were receiving 5-8 calls per week related to intentional inhalation. After the ordinance was passed instituting a ban, the calls related to intentional inhalation went to zero.

82. The nearby town of Pangburn, Arkansas is reportedly considering instituting a similar ordinance banning sales of computer dusters.³¹

83. Taken as a whole, this evidence points to an alarming increase in intentional inhalation which has impacted even some of the smallest communities in the U.S. Intentionally inhalation of DFE dusters is a public health crisis.

C. Intentional inhalation and the addictive nature of DFE – a deadly combination

84. According to the National Institute of Drug Abuse (“NIDA”) “addiction” is chronic, relapsing disorder characterized by compulsive drug seeking, continued use despite harmful consequences and long-lasting changes in the brain. “Abuse” is defined as misusing a substance to get high.

85. If a person compulsively uses computer dusters and meets the Diagnostic and Statistical Manual of Mental Disorders (“DSM”) criteria for inhalant use disorders, as shown below, the person would be assigned this disorder with a DFE specifier.

³¹ Tara Thomas, *Pangburn Watching Bald Knob’s Duster Ban*, WHITE CNTY. CITIZEN (Oct. 22, 2020), https://www.thedailycitizen.com/news/pangburn-watching-bald-knobs-duster-ban/article_53297891-adee-5f4a-9c31-71c100839517.html.

Table 1 – Criteria for the diagnosis of inhalant use disorders from the 5th version of the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-5)

Diagnostic Criteria
<p>A. A problematic pattern of use of a hydrocarbon-based inhalant substance leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:</p> <ol style="list-style-type: none"> 1. The inhalant substance is often taken in larger amounts or over a longer period than was intended. 2. There is a persistent desire or unsuccessful efforts to cut down or control use of the inhalant substance. 3. A great deal of time is spent in activities necessary to obtain the inhalant substance, use it, or recover from its effects. 4. Craving, or a strong desire or urge to use the inhalant substance. 5. Recurrent use of the inhalant substance resulting in a failure to fulfill major role obligations at work, school, or home. 6. Continued use of the inhalant substance despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of its use. 7. Important social, occupational, or recreational activities are given up or reduced because of use of the inhalant substance. 8. Recurrent use of the inhalant substance in situations in which it is physically hazardous. 9. Use of the inhalant substance is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance. 10. Tolerance, as defined by either of the following: <ol style="list-style-type: none"> a. A need for markedly increased amounts of the inhalant substance to achieve intoxication or desired effect. b. A markedly diminished effect with continued use of the same amount of the inhalant substance. <p>Specify the particular inhalant: When possible, the particular substance involved should be named (e.g., “solvent use disorder”).</p>

86. Per the NIDA, a substance is considered addictive if: (1) the substance impacts the brain’s circuitry; and (2) changes produce compulsive use despite harmful consequences.

87. At least 12 case studies support the broad consensus that DFE is highly lipophilic, crosses the blood-brain barrier, directly affects the central nervous system, stimulates the gamma-aminobutyric acid (“GABA”) receptors, and inhibits the N-methyl-D-aspartate (“NMDA”) receptors. These studies indicate that DFE meets the first element for being an addictive substance:

Causal Explanation from Case Reports of Intoxication from DFE
<p>“This refrigerant, used as a propellant in spray cans, is believed to exert its psychoactive effects by stimulating the GABA receptors and by inhibiting the NMDA receptors; other studies suggest that inhalants promote the release of dopamine in specific brain areas (Kurniali et al., 2012; Garland and Howard, 2012; Bass, 1970; Jevtovic-Todorovic et al., 1998)...”³²</p>
<p>“DFE is a central nervous system (CNS) depressant associated with a brief sensation of euphoria when inhaled. Prolonged or excessive use is associated with toxicity, and abrupt cessation can induce withdrawal ... DFE acts as a CNS depressant via glutamate and γ-aminobutyric acid receptors, causing a brief euphoria when inhaled.”³³</p>
<p>“Hydrocarbon inhalants rapidly access the central nervous system because of their lipophilicity. Here, these inhalants stimulate gamma-aminobutyric acid (GABA) receptors, causing inhibition in the central nervous system similar to the effects of ethanol. This can cause euphoria, disorientation, agitation, and impaired judgment. Because euphoria is often experienced, difluoroethane abuse is associated with patients presenting with anhedonia and other depressive symptoms, much like the patient of this case. It provides a rapid high which in turn dissipates within a matter of minutes, making it both highly desirable and highly dangerous for its abusers.”³⁴</p>
<p>The sought after euphoria or “high” can also be accompanied by central nervous system depression due to the extreme lipophilic properties of the gas and increased gamma-aminobutyric acid type A receptor affinity.³⁵</p>
<p>“This compound has a high degree of lipophilicity which, when inhaled, crosses the blood brain barrier causing a state of euphoria and CNS depression. Serious toxicity from acute exposure is almost always from deliberate abuse or occupational exposure in a confined space, either from dysrhythmia or simple asphyxia from displacement of oxygen.”³⁶</p>
<p>Inhaled DFE accumulates in high levels in the brain, causing euphoria, intoxication, and confusion.³⁷</p>
<p>Dust Off [sic] contains 1,1-difluoroethane, a halogenated hydrocarbon that works similarly to other abused inhalant products. Inhalation avoids hepatic first-pass metabolism, and as a result generates high CNS concentrations and rapid onset of intoxication: euphoria, disinhibition, confusion, and in some cases obtundation.³⁸</p>

³² Ermelinda Levari et al., *The Dangerous Use of Inhalants Among Teens: A Case Report*, 1 EMERGING TRENDS IN DRUGS, ADDICTIONS, AND HEALTH 100006, at 2 (2021).

³³ Adam Custer et al., *Difluoroethane Inhalant Abuse, Skeletal Fluorosis, and Withdrawal*, 37 FED. PRACTITIONER 288–89 (2020).

³⁴ Clara B. Novotny, Sarah Irvin & Eduardo D. Espiridion, *Acute Psychosis Following 1,1-Difluoroethane Inhalation*, 11 CUREUS e5565, at 2 (2019).

³⁵ Erika L. Faircloth, Jose Soriano & Deep Phachu, *Inhalation of 1-1-difluoroethane: A Rare Cause of Pneumopericardium*, 10 CUREUS e3503, at 1 (2018).

³⁶ Mohan Punja, Dennis Bradley Langston & Maurice Walter Smith, *Cryogenic Dermal Injuries to the Chest Secondary to Inhalational Abuse of Keyboard Cleaner*, 56 CLINICAL TOXICOL. 672, 672 (2018).

³⁷ Eric Cohen et al., *Rapid-Onset Diffuse Skeletal Fluorosis from Inhalant Abuse: A Case Report*, 4 JBJS CASE CONNECT e108, at 4 (2014).

³⁸ Kristen Calhoun et al., *Inhaling Difluoroethane Computer Cleaner Resulting in Acute Kidney Injury and Chronic Kidney Disease*, 2018 CASE REPORTS IN NEPHROLOGY 4627890 (2018).

<p>“It is known that they depress the central nervous system by stimulating γ-aminobutyric acid receptors and inhibiting <i>N</i>-methyl-<i>D</i>-aspartate receptors. Other studies suggest that inhalants causes in key regions of the brain.”³⁹</p>
<p>Like other volatile hydrocarbons, difluoroethane is lipophilic and quickly crosses the blood-brain barrier with immediate CNS effects. Peak blood concentrations occur 10-20 seconds after inhalation. The euphoric high that results from inhaling or “huffing” difluoroethane can last for 15-30 minutes. Clinical presentation varies and depends on dose and exposure time.⁴⁰</p>
<p>As a halogenated hydrocarbon, 1,1-difluoroethane is well absorbed via the lung, and rapidly distributed to organs with high fat content such as brain. Due to its high blood gas partition coefficient, the onset of effects with inhalation of this substance can be as rapid as an intravenous injection although the peak effects may be delayed because of slower tissue diffusion.”⁴¹</p>
<p>Inhalation of volatile hydrocarbons rapidly distributes them throughout the body, producing a quick “high” within seconds to minutes.⁴²</p>
<p>The majority of hydrocarbons started their therapeutic use as anesthetics. The mechanism of action associated with the euphoria and disinhibition associated with hydrocarbon abuse is thought to involve <i>N</i>-methyl-<i>D</i>-aspartate (NMDA) antagonism and/or gamma aminobutyric acid (GABA) stimulation. The NMDA receptor type that appears to be the most sensitive to solvents is also the most prevalent form in the brain during adolescence.⁴³</p>

88. Regarding the second element, “compulsive use” refers to a pattern of consumption that is stimulus-bound (i.e., the person is seeking a reward), stereotyped (i.e., repeated acts over time), and difficult to control.⁴⁴ “Harmful consequences” refers to disruptions in primary role functions in life (e.g. relationships, employment, education) and negative impacts on a person’s physical, mental, or emotional health.

89. Real world case reports shows that DFE’s impact on the brain leads to compulsive use with harmful consequences:

³⁹ Peter C. Kurniali et al., *Inhalant abuse of computer cleaner manifested as angioedema*, 30 AM. J. EMERGENCY MED. 265.e3–5, 265.e3–4 (2012).

⁴⁰ C. Clinton Frazee et al., *Two Fatalities Involving 1,1-difluoroethane*, in TOXICOLOGY CASES FOR THE CLINICAL AND FORENSIC LABORATORY, 401, 402 (Hema Ketha & Uttam Garg, eds., 2020), available at <https://linkinghub.elsevier.com/retrieve/pii/B9780128158463000806>.

⁴¹ Zhenggang Xiong et al., *Sudden Death Caused by 1,1-difluoroethane Inhalation*, 49 J. FORENSIC SCI., 627 (2004).

⁴² H. Evan Dingle & Saralyn R. Williams, *Multi-Organ System Injury from Inhalant Abuse*, 23 PREHOSPITAL EMERGENCY CARE, 580, 581 (2019).

⁴³ Kathryn T. Kopec & Black Bauer, *ACMT Toxicology Visual Pearls: I’ll Huff and I’ll Puff...*, ALIEM (June 22, 2020), <https://www.aliem.com/huffing/>.

⁴⁴ S. T. Tiffany & B. L. Carter, *Is Craving the Source of Compulsive Drug Use?*, J. PSYCHOPHARMACOLOGY (Oxford, England), Vol. 12(1), 23–30 (1998), available at <https://doi.org/10.1177/026988119801200104>.

Narratives from Published Case Studies of Compulsive Behaviors Related to Intentional Inhalation
Inhalation of 16 cans of Dust-off [sic] in a single episode, including daily use for a few weeks ⁴⁵
Medical visit preceded by inhalation of 10 cans of Dust-off [sic] in a single episode ⁴⁶
Patient reported abusing a computer dust removal product “Dust Off” [sic] daily for the past 2 years. On day of presentation, he inhaled 10 cans ⁴⁷
Patient suffered a relapse and used 8 cans of Dust-Off® per day for 2 weeks ⁴⁸
Patient started to inhale this product 8 times daily for 7 years ⁴⁹
Patient self-reported a 6-month history of inhaling 20-25 cans of DFE per day ⁵⁰
Patient was inhaling DFE every day, going through multiple 300 mL cans daily ⁵¹
Patient reported abusing 9 to 11 cans daily for the previous 11 months ⁵²
Patient had been huffing up to 10 canisters daily for a period of 9 months ⁵³
Patient stated that the last thing he remembered was “huffing” 6-10 cans of the computer cleaning product, Dust-Off ⁵⁴
Patient admitted to an “inhalational binge” with at least 6 cans of this product over the past 3 days ⁵⁵
He admitted to huffing 2-7 cans of air dust cleaner on a weekly basis for 3 years ⁵⁶

⁴⁵ A. Sidlak et al., *Severe cardiotoxicity and hypocalcemia from chronic inhalation of 1,1-difluoroethane*, 57 CLINICAL TOXICOL. 1036 (2019).

⁴⁶ M. Patel et al., *Pneumomediastinum, acute kidney injury, rhabdomyolysis, and cryogenic dermal injuries secondary to inhalation abuse of keyboard cleaner*, 15 J. MED. TOXICOL. 78 (2019).

⁴⁷ K. Orjuela & V. Patil, *Duster abuse: A recurrent spell*, 14 EPILEPSY CURRENTS 164–65 (2014).

⁴⁸ I. Honkanen et al., *An unlikely source of periostitis*, 33 J. GENERAL INTERNAL MEDICINE 464 (2018).

⁴⁹ A.K. Gupta & G.M. Chan, *Chronic Difluoroethane Abuse Associated Peripheral Neuropathy Treated Successfully with Gabapentin*, 47 CLINICAL TOXICOL. 715 (2009).

⁵⁰ Custer, et al., *supra* note 33, at 288.

⁵¹ Shiliang A. Cao et al., *Air Duster Inhalant Abuse Causing Non-ST Elevation Myocardial Infarction*, 12 CUREUS e8402, at 2 (2020).

⁵² Alex Ponce et al., *Acute skeletal fluorosis in the setting of 1,1-difluoroethane abuse*, 57 CLINICAL TOXICOL. 374, 374 (2019).

⁵³ Regina Liu & Thomas Blair, *Skeletal Fluorosis and “Sniffer’s Dermatitis” After Inhalant Abuse with 1,1-Difluoroethane*, 23 PROCEEDINGS OF UCLA HEALTH (2019).

⁵⁴ Erika L. Faircloth et al., *Inhalation of 1,1-difluoroethane: A Rare Cause of Pneumopericardium*, 10 CUREUS e3503, at 2 (2018).

⁵⁵ Mohan Punja et al., *Cryogenic dermal injuries to the chest secondary to inhalational abuse of keyboard cleaner*, 56 CLINICAL TOXICOL. 672, 672 (2017).

⁵⁶ Katherine Peicher & Naim M. Maalouf, *Skeletal Fluorosis Due to Fluorocarbon Inhalation from an Air Dust Cleaner*, 101 CALCIFIED TISSUE INT’L, 545, 545 (2017).

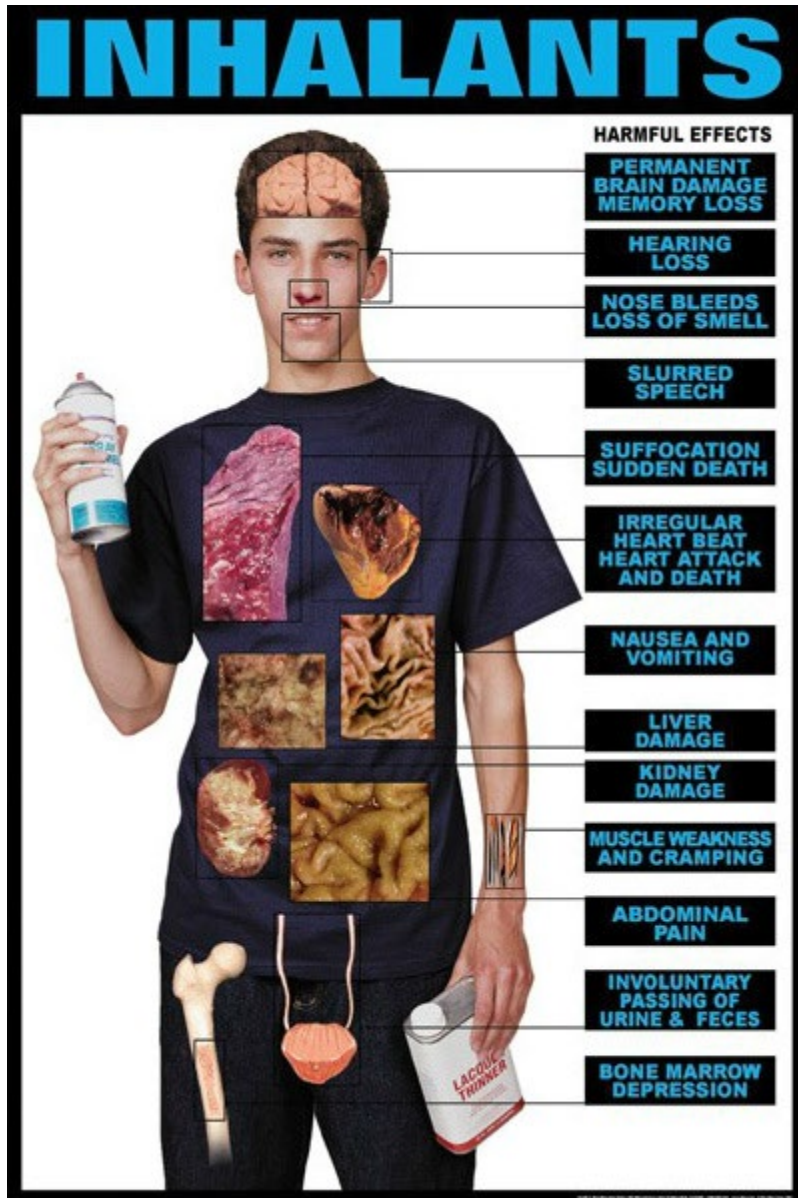
90. The incidents described in each of these studies all occurred after Defendants introduced the bitterant DB into their computer dusters. Addition of a bitterant is discussed in Section E, *infra*.

91. As demonstrated by these medical reports and studies, compulsive behavior of inhaling DFE persisted despite very harmful consequences. Specifically, in addition to death from cardiac arrest or Sudden Sniffing Death Syndrome, the following medical conditions have been directly attributed to intentionally inhaling DFE: (1) skeletal fluorosis/bone deformities; (2) bone fractures from falls; (3) motor vehicle crashes; (4) chemical burns, blisters and rashes; (5) dysrhythmia; (6) toxic myopericarditis; (7) ventricular fibrillation, tachycardia and other cardiac dysfunction; (8) acute kidney injury and failure; (9) pneumomediastinum; (10) dyspnea; (11) seizures; (12) loss of motor control; and (13) psychosis.⁵⁷

92. The non-profit organization Families United Against Inhalant Abuse (“Families United”) also tracks and reports the various harmful effects of intentionally inhaling DFE. Families United reports that, aside from causing death, intentional inhalation can lead to permanent brain damage, hearing loss, loss of smell, irregular heartbeat, liver damage, kidney damage, and bone marrow depression, as depicted on the following graphic.⁵⁸

⁵⁷ Clara B. Novotny et al., *Acute Psychosis Following 1,1-Difluoroethane Inhalation*, 11 CUREUS e5565 (2019).

⁵⁸ FAMILIES UNITED AGAINST INHALANT ABUSE, *Effects of Inhalant Abuse*, <https://familiesunitedagainstinhalantabuse.org/our-story/effects-of-inhalant-abuse/> [<https://web.archive.org/web/20231010055804/http://familiesunitedagainstinhalantabuse.org/our-story/effects-of-inhalant-abuse/>] [hereinafter FUAIA, *Effects of Inhalant Abuse*].



93. Moreover, recent research shows that intentionally inhaling DFE can lead to withdrawal psychosis.⁵⁹ Other studies have demonstrated that 47.8% of persons who met the criteria for inhalant dependence reported experiencing three or more inhalant-related withdrawal symptoms which were “clinically significant,” a percentage nearly equivalent to the percentage of

⁵⁹ Custer, et al., *supra* note 33, at 288–89.

persons with cocaine dependence who reported clinically significant cocaine withdrawal symptoms.⁶⁰ This data indicates that DFE is highly addictive.

94. The addictive nature of intentionally inhaling DFE, combined with the risks it poses creates a scenario similar to Russian Roulette every time a user inhales DFE. Cardiac arrest or Sudden Sniffing Death can occur the first time a duster is inhaled and lead to immediate death.⁶¹ Non-fatal yet permanent damage to various organs, including permanent brain damage, can also occur as described above.⁶²

D. The numbers of deaths attributed to intentional inhalation are significant and rising.

95. The National Inhalant Prevention Coalition (“NIPC”) reports that the number of inhalant-related deaths in the United States is approximately 100-125 people per year.⁶³ However, this number is incorrect and far below the actual number of deaths. As the executive director for the Alliance for Consumer Education—the industry trade group—explained in a newspaper, inhalant-related deaths are underreported because many are recorded as something else.⁶⁴ Other researchers concur.

⁶⁰ Brian E. Perron et al., *The prevalence and clinical significance of inhalant withdrawal symptoms among a national sample*, 2 SUBSTANCE ABUSE AND REHABILITATION 69–76 (2011).

⁶¹ M. Bass, *Sudden Sniffing Death*, 212 JAMA 2075–2079 (1970). *See also*, A. Groppi et al., *A Fatal Case of Trichlorofluoromethane (Freon 11) Poisoning. Tissue Distribution Study by Gas Chromatography-Mass Spectrometry*, 39 J. FORENSIC SCI. 871, 871–876 (1994); Xiong, *supra* note 41, at 627–29; J. Avella et al., *Fatal cardiac arrhythmia after repeated exposure to 1,1-difluoroethane (DFE)*, 27 AM. J. FORENSIC MED. PATHOL. 58, 58–60 (2006).

⁶² FUAIA, *Effects of Inhalant Abuse*, *supra* note 58.

⁶³ Corey Reynolds, *How to Determine if a Death was Caused by Inhalants*, NAT’L TASC (Nov. 8, 2023), <https://www.nationaltasc.org/determine-death>.

⁶⁴ Carter Sherman, *Inhalants – The Easy to Acquire but Deadly Drug That Nobody Talks About*, HOUSTON PRESS (Sept. 6, 2016, 6:00 AM), <https://www.houstonpress.com/news/inhalants-the-easy-to-acquire-but-deadly-drug-that-nobody-talks-about-8730670> [<https://web.archive.org/web/20210801093232/https://www.houstonpress.com/news/inhalants-the-easy-to-acquire-but-deadly-drug-that-nobody-talks-about-8730670>].

96. Families United also tracks death statistics attributed to DFE inhalation. Their report is grim. In Virginia, Florida, Los Angeles and San Diego Counties in California, 17 counties in Pennsylvania, and Travis County, Texas alone, they found a total of 1,109 inhalant deaths from 2007 through 2019. Of these figures, an eye-popping *648 deaths* were attributed to DFE intoxication.⁶⁵

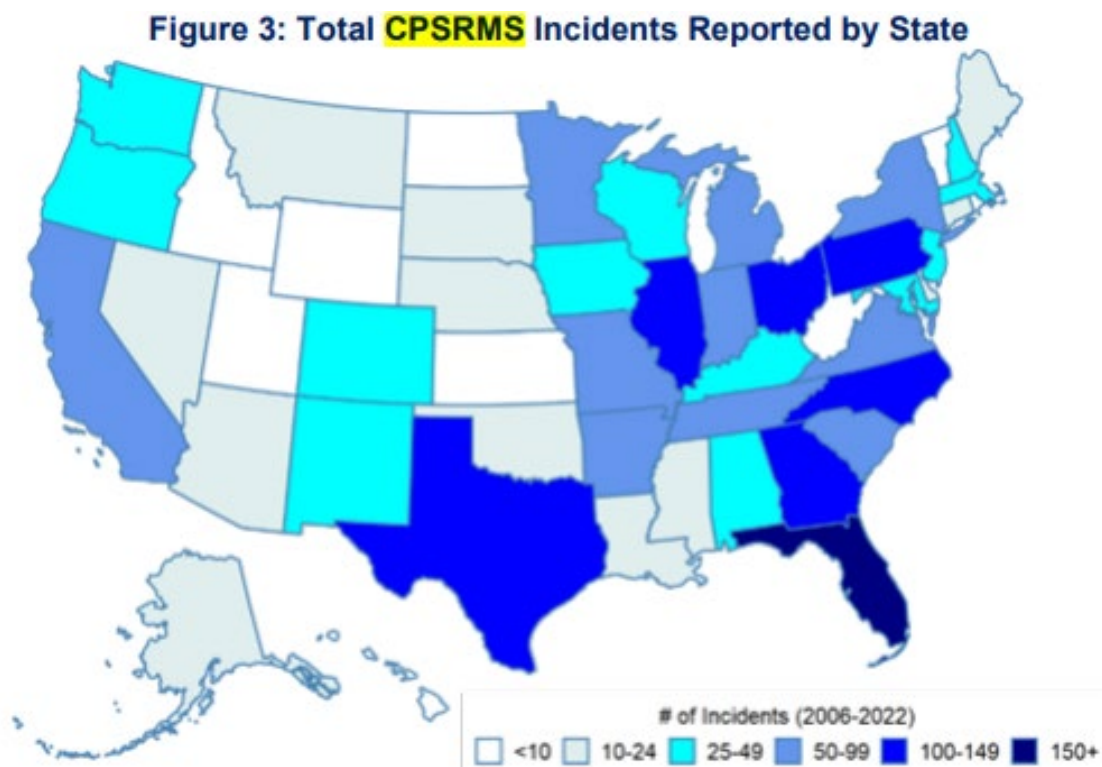
97. Perhaps the most compelling statistic on deaths attributed to DFE is from a clearinghouse maintained by the CPSC known as the Consumer Product Safety Risk Management System (“CPSRMS”), which is separate and distinct from NEISS. Between 2006 and 2022, CPSC received reports for 1,210 unique incidents involving inhalation hazards from aerosol dusters (of which 99.3% or 1,201 were fatal), and separately, 1,115 unique fatal incidents involving DFE toxicity (where dusters were not specifically mentioned, but were most likely the culprit). If all the remaining 1,115 DFE-related deaths can be attributed to dusters (which is likely based on anecdotal evidence referenced), this would amount to 2,324 aerosol duster incidents (including 2,316 fatalities) reported in CPSRMS.⁶⁶

98. The problem is getting worse. Over 80% of the duster inhalation incidents in CPSRMS occurred between 2013 and 2022. Similarly, 84% of the deaths attributed to DFE toxicity in CPSRMS occurred between 2013 and 2022.

⁶⁵ FAMILIES UNITED AGAINST INHALANT ABUSE, *Inhalant Deaths in US*, <https://familiesunitedagainstinhalantabuse.org/inhalent-deaths-in-us/> [<https://web.archive.org/web/20230325041644/https://familiesunitedagainstinhalantabuse.org/inhalent-deaths-in-us/>].

⁶⁶ U.S. CONSUMER PROD. SAFETY COMM’N, STAFF BRIEFING PACKAGE – AEROSOL DUSTER PETITION, July 26, 2023, at 14–17, available at https://www.cpsc.gov/s3fs-public/Petition-Requesting-Rulemaking-to-Establish-Safety-Standard-for-Aerosol-Duster-Products-Petition-CP-21-1.pdf?VersionId=.NohA6DG6WsXh_tsjhGuA7RuqMCOvxSW.

99. The clearinghouse data reflects deaths in every state in the U.S., plus the District of Columbia and other U.S. territories. The CPSC data comes from death certificates and medical examiner and coroner reports, among other reliable sources. The states with the most aerosol duster inhalation incidents were Florida, Texas, California, Georgia, and Illinois. The states from which the most DFE-related death reports were received were Florida, Ohio, Pennsylvania, Illinois, and North Carolina. States with the most CPSRMS reports related to this analysis were Florida (222), Texas (121), Illinois (115), Ohio (105), Pennsylvania (105), and North Carolina (105). Upon information and belief, these numbers represent only the tip of the iceberg.⁶⁷



100. These figures undercount deaths for several reasons. First, there is a lag time between date of death and reporting to the CPSC.⁶⁸ Secondly, the tests for DFE are not part of the typical battery of tests performed during an autopsy. Acute 1,1-Difluoroethane intoxication is

⁶⁷ *Id.* at 16–17, fig. 3.

⁶⁸ *Id.* at 16.

determined using a volatile test, which evaluates toxicity of the decedent's blood. A femoral blood sample is submitted to a reference laboratory for 1,1-Difluoroethane using a gas chromatograph/mass spectrometer. But volatile testing for DFE is not part of the typical autopsy battery of tests. A case study co-authored by doctors at Children's Mercy Hospital, University of Missouri School of Medicine, and the Office of Jackson County Medical Examiner, all in Kansas City, Missouri, involving two deaths attributed to 1,1-Difluoroethane illustrates this problem. The authors write: "DFE is not typically included in routine postmortem toxicology screens and could be overlooked without appropriate scene investigation, case history and/or anatomical pathology findings."⁶⁹ This study and others like it have advocated for medical examiners to include volatile tests as part of routine autopsy screens to properly identify DFE-related deaths.

101. Aside from delay in reporting and undercounting DFE-related deaths during autopsies, there are also numerous bystanders killed each year as a direct result of DFE abuse. Many of these bystanders are killed by vehicles operated by individuals driving under the influence of DFE. Yet, their deaths are not always attributed to DFE abuse.

E. The CPSC has proposed a rule to ban DFE-based dusters

102. On August 1, 2023, the CPSC voted 3-1 to grant a petition to initiate rulemaking "to adopt a mandatory safety standard to address the safety hazards associated with intentional inhalation of fumes from aerosol duster products" containing DFE.⁷⁰ Commissioner Trumpka issued a statement in support of this action noting the abuse of duster cans "is a nationwide

⁶⁹ Frazee, *supra* note 40, at n.38.

⁷⁰ See U.S. CONSUMER PROD. SAFETY COMM'N, RECORD OF COMMISSION ACTION, Aug. 2, 2023, available at https://www.cpsc.gov/s3fs-public/RCAPetitionRequestingRulemakingtoEstablishSafetyStandardforAerosolDusterProductsPetitionCP21_1.pdf?VersionId=nQcgEM4wvCJE97zmhwYCdAkwuluYerIt (Families United was the petitioner in this matter).

problem” and “one of the most abused substances among high school students”—the “social cost of injuries and deaths from aerosol duster abuse stands at over \$1 billion per year.”⁷¹

103. On July 30, 2024, the CPSC published a notice of proposed rulemaking that would declare “any aerosol duster products that contain more than 18 mg in any combination of HFC-152a and/or HFC-134a” as “banned hazardous substances under the Federal Hazardous Substances Act (FHSA).”⁷²

104. The CPSC has proposed the rule to address the “deaths and injuries associated with the propellants HFC-152a [1,1-difluoroethane] and HFC-134a [1,1,1,2-tetrafluoroethane] used in aerosol duster products.”⁷³

105. When broken down per can sold, the societal cost of the aerosol duster epidemic exceeds \$50 per can. And this figure excludes property damages and injuries or fatalities of bystanders injured due to intentional inhalation. Clearly the risk presented by aerosol dusters outweighs any plausible utility.

F. Content of the duster cans and subsequent addition of bitterant due to foreseeable use as an inhalant.

106. During all times relevant to this case, Defendants designed, tested, labeled, marketed, and distributed Ultra Duster, Dust-Off, Endust, Inland Air Duster and private label versions of each of them for sale across the United States, including in the State of Missouri and each of the other 49 states and territories.

⁷¹ *Id.*

⁷² Banned Hazardous Substances: Aerosol Duster Products Containing More Than 18 mg in Any Combination of HFC-152a and/or HFC-134a, 89 Fed. Reg. 61363 (proposed July 30, 2024) (to be codified at 16 C.F.R. pt. 1500).

⁷³ *Id.*

107. Defendants were responsible for designing, manufacturing, testing, labeling, marketing and distributing the cans of computer duster that addicted, injured, and killed Jonathan Kendrick.

108. Defendants contract with big box retailers across the United States and in the Kansas City, Missouri metropolitan area to stock and sell their dusters to consumers, many of whom purchase these products in multiple quantities and on a repeated basis to intentionally inhale. To maximize profit, Defendants offer their dusters for sale in multi-packs of up to 12 or more cans for as little as \$1.89 per can. A single can deliver up to 100 “hits” of DFE, making it among the cheapest and most readily available drugs.

109. Upon information and belief, Defendants encourage resellers to prominently market their computer dusters on endcaps and near check out areas with prominent signage.

110. Per the Safety Data Sheet, revision dated 12/2016, Surf onn. (also known as ONN) is comprised 100% of 1,1-Difluoroethane. This version of Surf onn.’s Safety Data Sheet was available on Walmart’s website.

Page 1 of 9

Safety Data Sheet

Reviewed on: 12/2016

1 Identification				
<ul style="list-style-type: none">• Product identifier: ONA19HO053, ONA19HO054, ONA19HO055• Trade name: <u>ONN Electronics 10oz. Duster</u>• Application of the substance / the mixture Surface cleaning• Details of the supplier of the Safety Data Sheet• Manufacturer/Supplier: Norazza, Inc. 3938 Broadway Buffalo, NY 14227 Phone: (716) 706-1160 Website: www.norazza.com• Emergency telephone number: ChemTel Inc. (800)255-3924, +1 (813)248-0585				
3 Composition/information on ingredients				
Chemical characterization: Substances				
<table><tr><th>CAS No.</th><th>Description</th></tr><tr><td>75-37-6</td><td>1,1-difluoroethane 100%</td></tr></table>	CAS No.	Description	75-37-6	1,1-difluoroethane 100%
CAS No.	Description			
75-37-6	1,1-difluoroethane 100%			

111. While this Safety Data Sheet claims the content is 100% DFE, Surf onn. cans also contain a trace amount of bitterant. Upon information and belief, the bitterant is only around .01% of each can.

112. AW, Technical Chemical Company, IPSG, and Norazza publish very similar Safety Data Sheets for their trademark branded dusters.

113. Below is the Safety Data Sheet for Surf onn. manufactured by Technical Chemical Company.

SAFETY DATA SHEET

Issuing Date 14-Oct-2022

Revision Date 12-Dec-2019

Revision Number 1

NGHS / English



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1. IDENTIFICATION

Product identifier

Product Name 100009080 surf onn. Electronic Air Duster 10 OZ.

Other means of identification

Product Code(s) 1553814

Recommended use of the chemical and restrictions on use

Recommended Use Pressurized Gas Duster (Aerosol)

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Identification Technical Chemical Co.

Address 3327 Pipeline Road
Box 139
Cleburne
TX
76033
US

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
1,1-Difluoroethane	75-37-6	100	-	-

114. Below is the Safety Data Sheet for Inland manufactured by IPSC.

Date Issued: 10/01/2011
MSDS No: 20111001-01
Date Revised: 10/01/2011
Revision No: 1

MATERIAL SAFETY DATA SHEET



Single, Twin Pack, Triple Pack - 152a Duster w/ Bitterant

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Inland: Air Duster Professional - 152a Duster
PRODUCT DESCRIPTION: HFC 152a Dusting Gas
PRODUCT CODE: 533539, 783159, 524868, 521799, 791004

MANUFACTURER 24 HR. EMERGENCY TELEPHONE NUMBERS

IPSC/Microelectronic Inc
2701 Charter Street, Suite A
Columbus, OH 43228

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Percent By Weight	CAS	EINECS
1,1-difluoroethane (HFC-152a)	> 99.9	75-37-6	
Ethanol	< 1	64-17-5	200-578-6
Denatonium benzoate	< 0.0001	37343-36-6	

115. Below is the Safety Data Sheet for Office Depot's duster:

OFFICE Depot (Canned-Air/Compressed Gas) Duster

-SKU# 911220 (Net 10Oz) Can
-SKU# 911245 (Net 10Oz) 3-Pack
-SKU# 110284 (Net 10Oz) 6-Pack
-SKU# 911280 (Net 3.5Oz) Can
-SKU#337-994 (Net 10Oz) 12-Pack

SAFETY DATA SHEET
DUSTER OFFICE DEPOT
1/17/2017

SECTION 1 - IDENTIFICATION

Product Name: DUSTER OFFICE DEPOT

Trade Name/Chemical Name: HFC-152a / Difluoroethane, R152a

Mfg. Model No.: ODP

Recommended Use: Remove dust and small particle

Restrictions On Use: Read back panel on can carefully before use.

Keep out of reach of children. Misuse by deliberately concentrating and inhaling contents may be harmful or fatal

Manufacturer: SHANGHAI AW CUSTOM MANUFACTURING & AEROSOL PROPELLANT CO., LTD.

Product Supplied By: AW Distributing, Inc.

Address: 2024 Middlefield Rd., Redwood City, CA 94063

Phone #: 1-415-867-7734

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients CAS # % TLV PEL UNITS

1,1-Difluoroethane 75-37-6 100

Contains: Bitterant

116. Defendants also place a warranty on the back of their dusters. AW, Surf onn., and Office Depot cans state: “Contains a bitterant to help discourage inhalant abuse.” Norazza’s can states: “Safety bitterant included to help discourage inhalant abuse.” Pictures of the warranties are set forth in I. Introduction, *supra*.

117. Numerous cases have been filed against Defendants, including Walmart, alleging wrongful death, products liability, and related claims arising from inhalation of DFE.

118. In one such case, *Michael Grieco et al v. Amy Merrill et al*, Walmart’s corporate representative, Joe Bussell, testified that incidents of huffing dating back to 2008 led Walmart to request that a bittering agent be added to Ultra Duster (at the time, AW rather than Norazza private-labeled Surf onn. for Walmart).⁷⁴

8 Q. well, the cover page for the article is dated July
9 31st, 2008; right?
10 A. (witness nods head.)
11 Q. So walmart was aware people were actually huffing in
12 their stores and passing out in 2008; right?
13 A. Yes. Again, those types of incidents are what led
14 us to request that there was a bittering agent in the
15 products.

⁷⁴ Joe Bussell Dep. 148:8–15, Oct. 22, 2015, *Michael Grieco et al v. Amy Merrill et al*, Case No. 502012CA021342 (Fla. 15th Cir. Ct.).

119. In 2011, Walmart required a bitterant in its store brand product and other duster products before they could be sold at Walmart stores. Yet, even with addition of a bitterant, intentional inhalation continued to be a problem. Indeed, Walmart was later notified that the bittering agent was ineffective.⁷⁵

6 Q. (Mr. Cornwell continued.) Well, it was clear
7 and foreseeable to Walmart that its customers, many of
8 them, buy this product to inhale it and get high in 2012.
9 MR. SANTIAGO: Object to the form.
10 MR. WOOD: Move. Like.
11 A. Again, Walmart was aware people bought this
12 type of product and were using it or misusing it. And
13 because of that, that's why Walmart moved to purchase only
14 those products with the bitterant. There's also warning
15 labels and quite a few things on the product that state
16 that people should not do that.
17 Q. (Mr. Cornwell continued.) Walmart, in fact, in 2012
18 was aware of an allegation by one of its former suppliers
19 that Ultra Duster and the bitterant in it were in —
20 that.
21 In 2012, when my clients were injured by a customer
22 of Walmart who had been inhaling Ultra Duster, Walmart was
23 aware that one of its former suppliers contended the
24 bitterant in Ultra Duster was ineffective: correct?

⁷⁵ *Id.* at 53:6–55:1.

1 A. Walmart had received a -- a notice from a competitor
 2 of this particular product supplier stating that, yes.
 3 Q. (Mr. Cornwell continued.) walmart was also aware of
 4 hundreds of incidents involving individuals inhaling Ultra
 5 Duster on store property, in the store parking lot,
 6 driving vehicles, crashing cars, killing themselves, and
 7 killing others, in 2012, wasn't it?
 8 MR. WOOD: Same objection.
 9 A. Again, I don't know the specific nature of the
 10 complaints. walmart was aware that there were incidents
 11 involving people inhaling this product, and that's why
 12 walmart engaged with the suppliers to determine what sort
 13 of action could be taken to deter that type of activity.
 14 Q. (Mr. Cornwell continued.) Do you know when walmart
 15 required its canned air suppliers to incorporate a
 16 bitterant in the product?
 17 A. I believe it was 2011.

22 A. As I mentioned earlier, we don't know the specific
 23 make up of -- or chemical composition of the products, but
 24 we know that in 2011 is when we had conversations with our
 25 suppliers and began to require that we purchased only

JOE BUSSELL - October 22, 2015 55
 1 canned air that contained a bittering agent.

120. Walmart made no reasonable efforts to determine whether the bitterant it required be added to computer dusters actually deterred intentional inhalation. Walmart did not review data or do any testing to determine whether the bitterant could be or was effective.

121. AW Distributing presented their corporate representative, Kennic Ho, for deposition in the *Grieco* case. Mr. Ho is also the current registered agent of both the AW Distributing and AW Product Sales. Mr. Ho was asked about the bitterant and was unable to identify it by name. He stated simply that the bitterant was “bitter and stinky.”⁷⁶

11:41 1 Do you know what the bitterant is that's
11:41 2 contained within Ultra Duster?
11:41 3 A. From what I know, bitterant is just -- tastes
11:41 4 bitter and stinky.
11:41 5 Q. Have you ever heard of something called
11:41 6 "denatonium benzoate"?
11:42 7 THE INTERPRETER: Counsel, can I research that
11:42 8 word in Chinese?
11:42 9 MR. KOLTON: Yeah.
11:42 10 THE INTERPRETER: Can you spell that for me.
11:42 11 MR. KOLTON: Sure.
11:42 12 D-e-n-a-t-o-n-i-u-m-b-e-n-z-o-a-t-e.
11:42 13 It's two --
11:42 14 And let me --
11:42 15 THE INTERPRETER: Denatonium; right?
11:42 16 MR. WARING: Object to form.
11:42 17 THE WITNESS: No.

⁷⁶ Kennic Ho Dep. 47:1–17 (Feb. 15, 2016), *Michael Grieco et al v. Amy Merrill et al.*, Case No. 502012CA021342 (Fla. 15th Cir. Ct.).

122. Later in his deposition, Mr. Ho recalled that the bittering agent was DB.⁷⁷

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11:43 1 E-mail string, Mr. Ho, between you and somebody named
11:43 2 Hosoi-San that appears to be forwarding an E-mail
11:43 3 between you and a Mitch Moses.
11:43 4 Can you take a look at it, please.
11:44 5 Do you agree with me that this a conversation
11:44 6 you're having with Mitch Moses about denatonium
11:44 7 benzoate?
11:44 8 MR. WARING: Object to form.
11:44 9 THE WITNESS: Yes.
11:44 10 BY MR. KOLTON:
11:44 11 Q. So you do know what "denatonium benzoate" is?
11:44 12 MR. WARING: Object to form.
11:44 13 THE WITNESS: So, looking at this E-mail, what
11:44 14 I was doing is I was just helping two parties to
11:45 15 exchange information.
11:45 16 BY MR. KOLTON:
11:45 17 Q. Which two parties were you helping?
11:45 18 A. Looking at this document here, one party is
11:45 19 the Japanese side, I hope.
11:45 20 The other side will be the American supplier.
11:45 21 Q. Do you remember what American supplier it was
11:45 22 or can you tell from this E-mail?
11:45 23 A. I believe they were called Tulstar.
11:45 24 Q. What is Tulstar, if you know?
11:45 25 A. It's a company name.


⁷⁷ *Id.* at 48:1–49:5.

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11:46	1	Q. Do you know what Tulstar does?
11:46	2	A. Based on this document, they probably sell
11:46	3	this thing.
11:46	4	Q. What thing are you making reference to?
11:46	5	A. The bitterant.

123. According to a Safety Data Sheet, revision dated March 17, 2010, AW's Ultra Duster was then comprised 100% of 1,1-Difluoroethane.

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MSDS INFORMATION

MATERIAL SAFETY DATA SHEET
Ultra Duster
Revised: 3/17/2010

SECTION I - CHEMICAL INFORMATION

Trade Name: HFC-152a
Chemical Name: Difluoroethane, R152a
Product Supplied By: AW Distributing, Inc.
Address & Phone #: 2024 Middlefield Rd., Redwood City, CA 94063
Emergency Phone #: Chemtrec 1-800-424-9300
Mfg. Model No.: AE420BWON

SECTION II - HAZARDOUS INGREDIENTS

Ingredients CAS # % TLV PEL UNITS
1,1-Difluoroethane 75-37-6 100

124. Several months later, a company named Bureau Veritas provided a Non-Corrosive Certificate for Ultra Duster. Per this certificate, dated November 12, 2010, Ultra Duster cans were comprised of 99.90% DFE and .10% 2,6-xylylcarbamoymethyl (another name for denatonium

benzoate or DB). The certificate also refers to “intentional misuse (*i.e.*, deliberate inhalation of the product)” indicating that AW Defendants were aware Ultra Duster was used as an inhalant.

125. Comparing the March 17, 2010, Safety Data Sheet to the November 12, 2010 Bureau Veritas Certificate, it appears that the formulation of Ultra Duster was changed to include DB. Based upon the testimony in the *Grieco* case, it appears AW added DB to its computer duster products to continue selling them at Walmart.

126. The other Defendants followed suit.

127. Defendant Falcon issued a press release in 2006 entitled “New Dust-Off (™) Formula Deters Inhalant Misuse.”⁷⁸ This formula was based on the joint research and development between Falcon and DuPont, which was subsequently patented in 2010.⁷⁹

128. According to the original patent:

[T]hese duster products provide a safe and valuable function to the consumer, but sometimes are involved in inhalation misuse incidents... One such approach [to deter intentional inhalation of dust removers] is to incorporate a denaturant in the aerosol duster than can be detected in an abuse scenario, but undetectable when duster products are used as recommended.⁸⁰

129. Greg Mas, one of the authors of the patent and the current Chief Financial Officer of Falcon Safety Products, gave testimony in another computer duster personal injury case

⁷⁸ Falcon Safety Products, *New Dust-Off® Formula Deters Inhalant Abuse*, CISON PRWEB (Oct. 26, 2006), <https://www.prweb.com/releases/2006/10/prweb461265.htm> [<https://web.archive.org/web/20220818105523/https://www.prweb.com/releases/2006/10/prweb461265.htm>].

⁷⁹ See *Liquified-Gas Aerosol Dusting Composition Containing Denatonium Benzoate*, U.S. Patent No. 7,754,096 B2 (filed Aug. 22, 2007) (issued July 13, 2010), available at <https://patentimages.storage.googleapis.com/02/9f/1f/044edd8fdb041d/US7754096.pdf> [hereinafter DB Formula Patent].

⁸⁰ *Id.*

involving intentional inhalation. Mas was asked about the quantity of DB added to each can of Dust-Off. Mas testified that the target range for the DB was “5 to 50 ppm [parts per million].”⁸¹

2 Q And do you recall what the target amount of
3 bittering agent was for cans of Falcon Safety Products
4 dusters that were being manufactured and sold by them?
5 A We wanted -- I think we covered this in the
6 last deposition, but we wanted to be within the range,
7 the defined range of the IP which is 5 to 50 PPM and we
8 tried to get it close to 10 PPM initially, as we talked
9 about in the last deposition.
10 Q And how did you go about, as you put it,
11 trying to get it close to 10 parts per million?
12 A Based on our doser. We're using an EFD doser
13 that's incredibly accurate using pharmacies -- not
14 pharmacies -- pharmaceuticals and medical labs.
15 Q And so the goal was to inject in each can an
16 amount of bittering agent that when expressed as a
17 percentage of the contents of the entire can, the
18 bittering agent would constitute approximately 10 parts
19 per million; is that correct?
20 A That was roughly what we wanted it to be.
21 Q When you say roughly, was there a range that
22 you sought to achieve?
23 A No, but it wasn't a perfect science, but we
24 were -- we were very close. Anything inside the 5 to 50
25 PPM was what we were targeting.

130. Yet, as the foregoing testimony shows, Defendants failed to conduct testing to confirm that the bitterant DB which they added to their dusters worked as warranted to deter

⁸¹ Gregory Mas Dep. 10:2–25 (June 18, 2019), *Shannon Cheney v. Stephen Willson et al*, Case No. 502013CA007140 (Fla. 15th Cir. Ct.).

intentional inhalation. The increasing problem of intentional inhalation as shown by the various public databases and surveys – which notably continued to increase rapidly after addition of the bitterant – indicates that the bitterant was ineffective as a deterrent.

131. Moreover, Defendants' sales figures appear to be inflated by the intentional inhalation. CFO Greg Mas also testified that Falcon sells **34 million cans per year**.⁸² This is a vast number which is inexplicable without considering the massive scope of the huffing epidemic.

Page 241

1 Q. What benefits do compressed gas dusters
2 provide that justifies death and serious injury to
3 incident bystanders who are injured by these people
4 driving around huffing?

5 A. A duster when --

6 MR. BEDARD: Objection to the form of
7 the question.

8 A. A duster when used correctly is
9 perfectly safe and it can be used in many, many
10 different situations. It's very effective, it's
11 efficient, it's very economical. We sell
12 about 34 million of them a year in the industry as a
13 subset of the 35 billion aerosols in the industry.

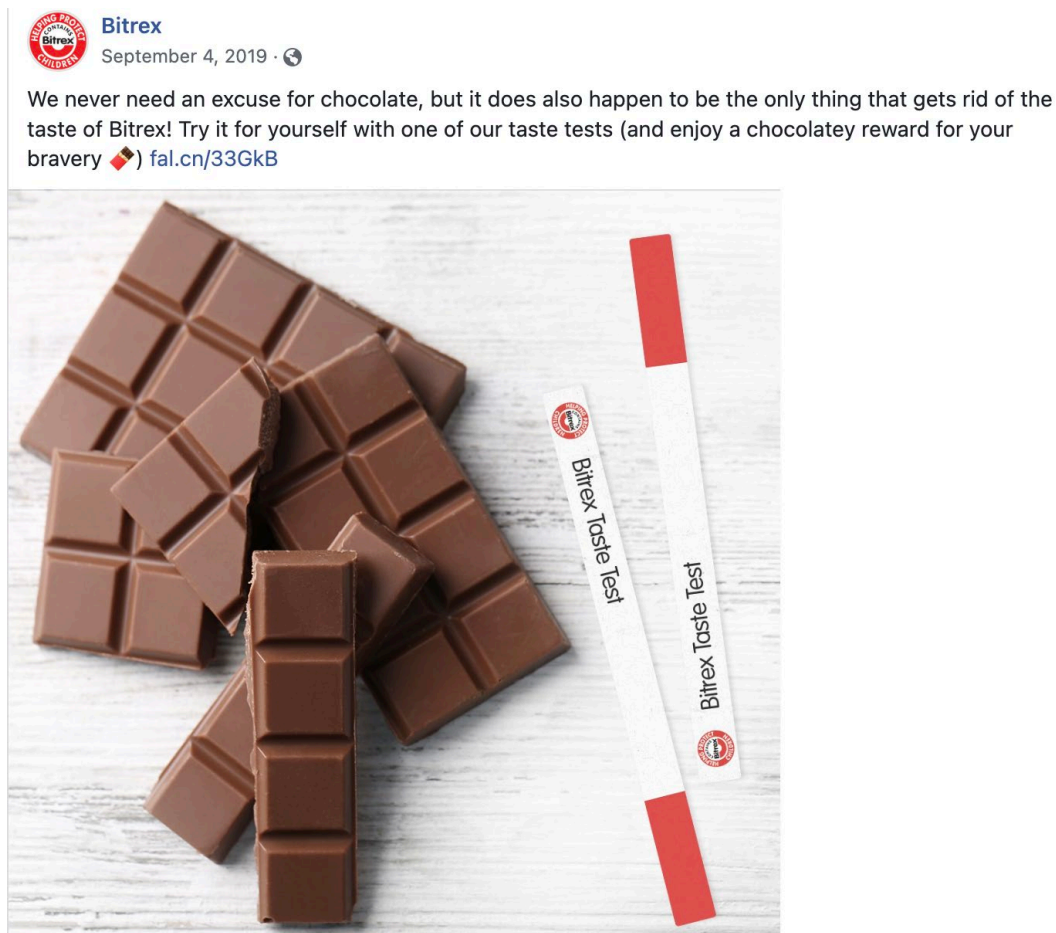
⁸² Gregory Mas Dep. 241:1–13 (July 14, 2016), *Shannon Cheney v. Stephen Willson et al*, Case No. 502013CA007140 (Fla. 15th Cir. Ct.) (excerpted from Exhibit C to Plaintiff's Response in Opposition to Defendants Renewed Motion for Summary Judgment).

G. DB is ineffective at deterring intentional inhalation and may increase the risks of intentional inhalation.

1. DB—A bitter denaturant used to prevent accidental poisoning

132. Denatonium benzoate, known as DB, is an alcohol denaturant which has been heavily promoted for inclusion in household products, gardening products, and cosmetics to prevent accidental ingestion by children.⁸³

133. According to the Guinness Book of World Records, DB (also known by its tradename “Bitrex”) is “the most bitter substance in the world.” Despite being the most bitter substance, the manufacturer of Bitrex openly advertises that the bitter taste can be easily averted with a sugary substance, like chocolate.



⁸³ C. Pulce & J. Descotes, *Denatonium Benzoate*, in *HUMAN TOXICOLOGY* (Jacques Descotes ed., 1996), available at <https://www.sciencedirect.com/topics/medicine-and-dentistry/denatonium-benzoate>.

134. DB has a modest effect on deterring accidental ingestions. For example, in a 1991 study, authors Sibert and Frude examined DB as a deterrent among 33 children aged 17-36 months. The children were provided orange juice containing 10 ppm of DB. 30 children took a drink of orange juice with DB. Among those 30 children, nearly one-fourth of the children proceeded to drink after the initial exposure.⁸⁴ Notably, the concentration of DB in this study was more than 25 times the concentration expected in the vapor phase of computer dusters.

135. Per the 2008 Cosmetic Ingredient Review Expert Panel, DB has the following perceptual characteristics:

Perceptual characteristics in measurement terms parts per million or parts per billion
DB is <i>detectable</i> at .01 ppm (10 ppb)
DB is <i>recognizably</i> bitter at .05 ppm (50 ppb)
DB is <i>unpleasantly</i> bitter at 10 ppm (10,000 ppb)
DB is <i>aversively</i> bitter at 20-50 ppm (20,000-50,000 ppb) ⁸⁵

2. **DB has not been added at the necessary concentration to deter abuse**

135. Detection and recognition are critical concepts related to the theory of bitterants as deterrents to inhalant huffing. Keast and Roper, in a 2007 article, defined these concepts as follows:

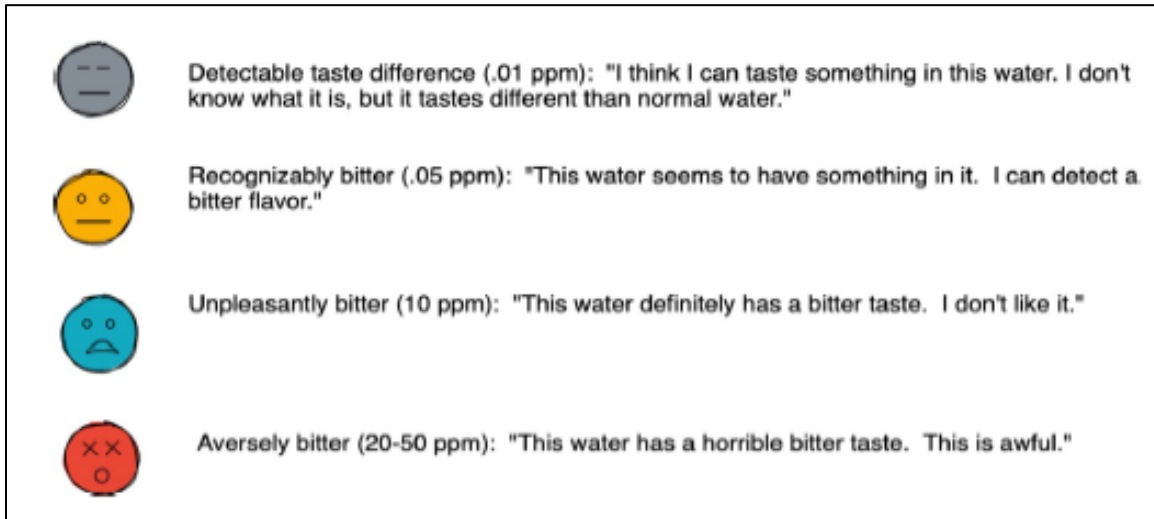
[A] chemical may be in a solution at a concentration that the sample population could not detect. As a concentration of the chemical increases, a detection threshold will be reached, the level at which the chemical in solution may be discriminated from water. As the concentration of the chemical increases further, the recognition threshold is reached, the point at which the quality (e.g. bitter) can be identified. As concentration of the chemical increases still further, the intensity of the bitterness mutually

⁸⁴ J. R. Sibert & N. Frude, *Bittering agents in the prevention of accidental poisoning: children's reactions to denatonium benzoate (Bitrex)*, 8 ARCHIVES OF EMERGENCY MED. 1 (1991).

⁸⁵ *Final Report of the Safety Assessment of Alcohol Denat., including SD Alcohol 3-A, SD Alcohol 30, SD Alcohol 39, SD Alcohol 39-B, SD Alcohol 39-C, SD Alcohol 40, SD Alcohol 40-B, and SD Alcohol 40-C, and the Denaturants, Quassin, Brucine Sulfate/Brucine, and Denatonium Benzoate* 1, 27 INT'L J. OF TOXICOLOGY 1 (2008), available at <https://doi.org/10.1080/10915810802032388> [hereinafter *Alcohol Denat. Final Report*].

increases to a theoretical asymptote where concentration increases no longer cause subsequent increases in intensity.⁸⁶

136. The following graphic illustrates these concepts:



137. As this graphic shows, aversely bitter is the threshold level of a true deterrent. The level of DB which is added to dusters per the DuPont patent is 5-50 ppm, which should fall within the range of being unpleasantly bitter to adversely bitter.⁸⁷ Yet, the data shows that intentional inhalation continues to increase. So, where is the disconnect? The science of addiction and the chemical properties of DB provide foreseeable reasons why it is ineffective in DFE duster products.

3. Differences between accidental ingestion and intentional ingestion have been ignored.

138. While accidental ingestion by children is often the result of normal exploratory behavior, intentionally inhaling DFE is a fundamentally different proposition. Specifically, the underlying motivation is completely different.

⁸⁶ Russell S. J. Keast & Jessica Roper, *A Complex Relationship Among Chemical Concentration, Detection Threshold, and Suprathreshold Intensity of Bitter Compounds*, 32(3) CHEM. SENSES 245, 245 (2007).

⁸⁷ See DB Formula Patent, *supra* note 79.

139. A 2010 study authored by Bromberg-Martin et al. observed:

We seek rewards and assign them a positive value, while we avoid aversive events and assign them a negative value. In other respects we treat rewarding and aversive events in similar manners, reflecting their similar motivational salience. Both rewarding and aversive events trigger orienting of attention, cognitive processing, and increases in general motivation.⁸⁸

140. While an unpleasant taste can plausibly disrupt accidental ingestion, whether DB produces a taste so disgusting that avoiding the aversive state (*i.e.*, unpleasant bitter taste) is more desirable than achieving the rewarding state (*i.e.*, euphoria or intoxication) must be considered. The patent Defendants follow fails to mention this consideration.⁸⁹

141. According to the original patent, people would be deterred from inhalant use if they simply “detected” DB in an intentional inhalation scenario.⁹⁰ However, to achieve a true deterrent effect, the concentration of DB must be at a level to make the experience sufficiently noxious or disgusting. While this may be true related to accidental ingestion, research suggests that inhalant huffing is entirely different. For example, if a person is motivated to get drunk, an unpleasant taste may not deter them from drinking alcohol. Similarly, exposing someone to the lowest possible concentration of DB that can be detected or recognized will likely not affect a goal-seeking behavior (*i.e.*, the intent to get high).

142. Per the DuPont patent, DB is added in solid form to the can of liquid DFE aerosol. DB dissolves within the can by addition of a solvent. The can is pressurized and the liquids are expressed in a gas vapor.⁹¹ There is no evidence to suggest that DB’s detection levels, recognition, and aversiveness in a concentrated vapor spray are equivalent to a liquid.

⁸⁸ E.S. Bromberg-Martin et al., *Dopamine in motivational control: Rewarding, aversive, and altering*, 68 NEURON 815, 815–34 (2010).

⁸⁹ See DB Formula Patent, *supra* note 79.

⁹⁰ *Id.*

⁹¹ *Id.*

143. Indeed, Stephen Willson, an individual who intentionally inhaled DFE duster products and subsequently hit the plaintiff in the *Cheney v. Willson* case while driving under the influence, testified regarding the taste of bitterant in Dust-Off, a brand identical in composition to the products at issue here. Willson could identify the bitterant taste but described it as not “overwhelming” and compared it to the taste of vodka.⁹²

2 (A.) It had a taste, but it wasn't an overwhelming --
3 it wasn't pleasant, but it wasn't overwhelming.
4 (Q.) So if I understand -- I want to make sure I heard
5 correctly. You said it was not a pleasant taste?
6 (A.) Uh-huh.
7 (Q.) Is that correct?
8 (A.) Yes.
9 (Q.) Okay. I'm just trying to make sure the record is
10 clear. That's why I was asking --
11 (A.) Okay. Yeah.
12 (Q.) And despite this unpleasant taste, was it your
13 desire to -- to get high that made you overcome this --
14 this unpleasant taste or --
15 (A.) Not un --
16 (Q.) -- suffer through it?
17 (A.) Not unlike vodka, which isn't particularly
18 pleasant, either. Yes.

⁹² Stephen Willson Dep. 58:1–18 (June 10, 2014), *Shannon Cheney v. Stephen Willson et al*, Case No. 502013CA007140 (Fla. 15th Cir. Ct.).

144. Willson's testimony indicates that the concentration of DB in the gas vapor phase is significantly less than the 5-50 ppm range which is contemplated by the DuPont patent. Willson describes his detection level as being in the .01-.05 ppm range and certainly below the level of being aversely bitter.

145. Researchers have noted that addition of the bitterant to computer dusters does not appear to deter intentional inhalation. Specifically, a study published in the Journal of American Toxicology notes: "Companies that manufacture [dusters] are aware of [inhalant abuse] and add a bittering agent to deter abuse, but it is unknown whether this reduces the prevalence or not."⁹³

4. Other considerations make DB an improper bitterant in this application

146. Even if DB has a deterrent effect—which the evidence indicates it does not—its impact has limited effect among the broader population of inhalant users. A CPSC report on aversive agents states:

The ability to detect the bitter taste of certain propylthiourea derivatives is a genetic trait. Between **15-30% of the adult population are unable to detect the bitter taste of this class of compounds**. Psychological studies have shown that non tasters may also be unable to detect other bitter molecules, **including saccharin and denatonium benzoate**.⁹⁴

147. In addition, there are serious potential harmful effects of DB as a bitterant. In a letter to the journal Forensic Toxicology authored by Perron, et al. (2010), certain individuals are at increased risk when inhaling DB-containing DFE due to DB being a bronchodilator. Specifically, they state:

The absorption of DFE and similar volatile anesthetics is rapid and minimally influenced by bronchial airway tone, but the potent relaxation induced by DB may impact the way DFE behaves in the body. While DB-induced bronchial

⁹³ Chris Vance et al, *Deaths Involving 1,1-Difluoroethane at the San Diego County Medical Examiner's Office*, 36 J. ANAL. TOXICOL. 626, 626–33 (2012), available at <https://academic.oup.com/jat/article/36/9/626/784617>.

⁹⁴ See U.S. CONSUMER PROD. SAFETY COMM'N, FINAL REPORT: STUDY OF AVERSIVE AGENTS 18 (1992) (emphasis added); see also *Alcohol Denat. Final Report*, *supra* note 85.

relaxation may not overly impact most individuals who inhale DB-containing DFE products, there is a potential risk that those with symptomatic asthma or other bronchoconstrictive disease may experience increased effects from DFE when inhaled with DB.

148. Moreover, the rapid effects of DFE simply make it unlikely that a person under the influence will be thinking about an unpleasant bitter taste in the same way that a sober individual would.

149. Even if DB had the potential to deter intentional inhalation, the levels at which it is added to Defendants' computer dusters have foreseeably failed to deter such use. Thus, intentional inhalation continues to occur, and Jonathan Kendrick is one of thousands of victims.

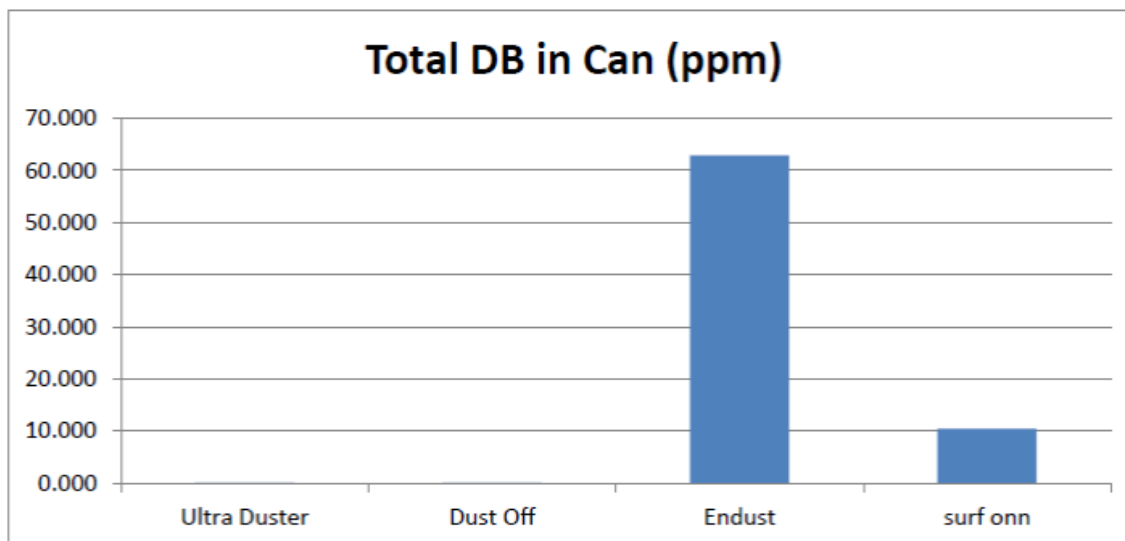
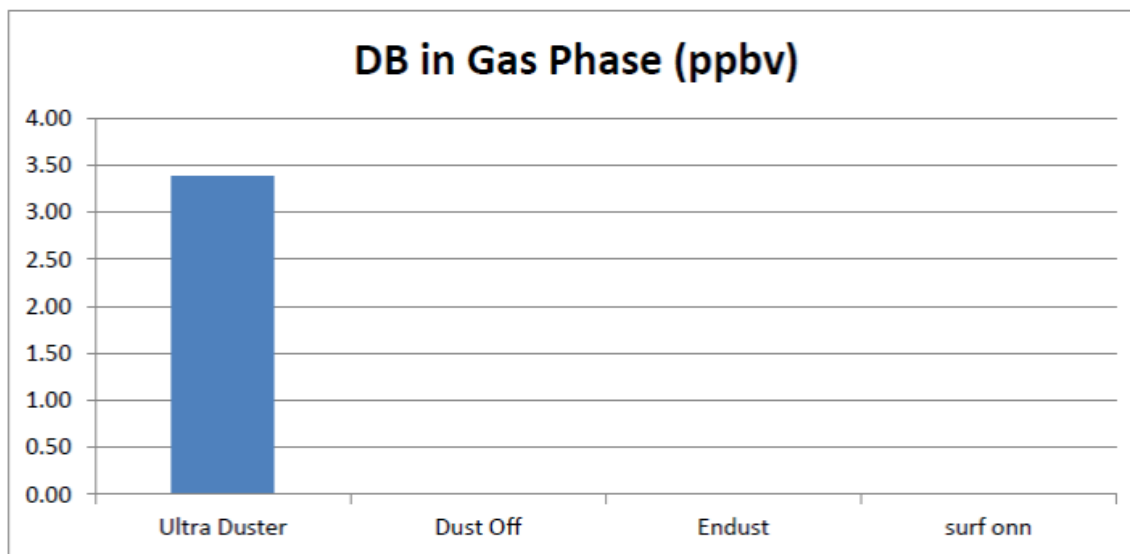
H. Independent tests show that DB is not present in the quantity Defendants represent or at the threshold level of detectability to most human subjects

150. An independent test of three 12 oz. cans of Ultra Duster, Dust Off, Endust, and Surf onn. was recently conducted by Research Triangle Park Laboratories, Inc. Specifically, the lab used a validated testing method to expel and measure the contents of each can. Cans were weighed before and after each phase of testing. The testing method mimicked an individual putting the can straw into their mouth and inhaling the product.

151. The lab utilized a capture apparatus that collected gas in a Tedlar sampling bag – a bag designed by DuPont and validated by the Environmental Protection Agency as appropriate for testing products in the gas phase.

152. The results were shocking: This test revealed that only trace amounts of DB were present in the gas phase of the Ultra Duster cans, and zero DB was present in the gas phase of the Dust Off, Endust, and Surf onn. cans. The test also showed wild fluctuations in the amount of DB inside the cans.

	Ultra Duster	Dust Off	Endust	surf onn
DB in Gas Phase (ppbv)	3.38	0.00	0.00	0.00
Total DB in Can (ppm)	0.019	0.001	62.869	10.432



153. This amount of DB is less than the recognized level at which a bitterant would be detectable to humans according to testing sponsored by the CPSC and presented by the Cosmetic Ingredient Review Expert Panel.⁹⁵

⁹⁵ *Id.*

Perceptual characteristics in measurement terms parts per million or parts per billion
DB is <i>detectable</i> at .01 ppm (10 ppb)
DB is <i>recognizably</i> bitter at .05 ppm (50 ppb)
DB is <i>unpleasantly</i> bitter at 10 ppm (10,000 ppb)
DB is <i>aversively</i> bitter at 20-50 ppm (20,000-50,000 ppb) ⁹⁶

154. This testing coupled with the foregoing test data shows that Defendants knew or should have known that the bitterant they represented would help deter inhalant abuse neither discourages nor deters the foreseeable intentional inhalation because DB is not present in a sufficient quantity.

155. Inland Air Duster, Office Depot duster, and all other dusters currently on the market are manufactured in a similar manner, also lack the necessary concentration of DB in the gas phase to reach a deterrent effect, and the manufacturing process for addition of DB to the cans is in a similarly inconsistent fashion resulting in wild fluctuations in quantity of the bitterant per can.

156. Defendants failed to adequately test to determine if the bitterant they advertise as a deterrent was added in a proper manner to perform as warranted, specifically to “discourage inhalant abuse.” Or worse, Defendants intentionally failed to add the proper amount of bitterant to cut costs and increase their own profits.

157. Upon their own warranty on their cans, Defendants undertook a duty to improve the safety of their computer dusters by adding bitterant to deter inhalant abuse. Defendants were also aware that, absent a bitterant, their computer dusters presented an unreasonable risk of harm to consumers.

⁹⁶ *Id.*

158. Defendants knew or should have known that the formulation in which the bitterant is added does not deter abuse and, thus, rendered their computer dusters defective. Yet, Defendants continued to design, manufacture, label, market and distribute the products in a defective manner.

159. Further, Defendants knew or should have known that intentional inhaling DFE is addictive and continues to lead to injuries and death, yet intentionally failed to warn consumers like Jonathan Kendrick that foreseeable intentional inhalation of the product could lead to inhalant addiction, inhalant abuse disorder, bone deformity and other injuries, and, ultimately, death.

160. Defendants labeled their computer dusters in a manner which contains false claims, specifically that each can “contains a bitterant to help discourage inhalant abuse” or similar language. Defendants are aware that the bitterant is ineffective and fails to discourage inhalant abuse.

161. Defendants placed their dusters into the stream of commerce in a defective and unreasonably dangerous manner.

162. The bitterant put into these cans does not come out of the cans in a sufficient quantity to deter intentional inhalation.

V. CLASS ACTION ALLEGATIONS

163. Plaintiff seeks certification on behalf of a Rule 23(c)(4) issue class defined as follows (the “Missouri Issue Class”):

All citizens of Missouri, and their heirs and survivors, who have (1) suffered or presently suffer injury or addiction; and/or (2) died from DFE intoxication (including acute 1,1-Difluoroethane intoxication or equivalent post-mortem cause of death terminology), arising from inhaling DFE-based liquid aerosol transferred in the course of business by AW Distributing, Inc., AW Product Sales & Marketing, Inc., Norazza, Inc., Technical Chemical Co., Micro Electronics, Inc., Micro Center Sales Corporation, International Product Sourcing Group, Inc., The ODP Corporation, ODP Business Solutions, LLC, Office Depot, LLC, Walmart, Inc., Wal-Mart Stores East, L.P., and Wal-Mart Stores East, L.L.C.

164. Excluded from the Class are: (a) any Judge or Magistrate Judge presiding over this action and members of their staff, as well as immediate family members; (b) Defendant and Defendant's predecessors, parents, successors, heirs, assigns, subsidiaries, and any entity in which Defendants or their parents have a controlling interest, as well as Defendant's current or former employees, agents, officers, and directors; (c) persons who properly execute and file a timely request for exclusion from the Class; (d) persons whose claims in this matter have been finally adjudicated on the merits or otherwise released; (e) counsel for Plaintiff and Defendant; and (f) the legal representatives, successors, and assigns of any such excluded persons.

165. Plaintiff reserves the right to modify or refine the definitions of the Class based upon discovery of new information and in order to accommodate any of the Court's manageability concerns.

166. Plaintiff seeks certification on behalf of a Rule 23(c)(4) class defined as above for particular issues including the following:

- a. whether Defendants' computer duster products were defectively designed;
- b. whether Defendants failed to warn users;
- c. whether Defendants negligently designed their computer duster products;
- d. whether Defendants negligently failed to warn users;
- e. whether Defendants knew or should have known that inhaling computer dusters was a foreseeable use of the product;
- f. whether Defendants knew or should have known that inhaling computer dusters could lead to addiction, inhalant abuse disorder, injury, and/or death;

- g. whether Defendants knew or should have known that the bitterant it allegedly added to computer dusters was ineffective in its stated purpose of being a deterrent to intentional inhalation;
- h. whether Defendants negligently warned by stating that the bitterant was added to discourage inhalant abuse or similar language in the written warning on their computer dusters;
- i. whether Defendants knew or should have known that the bitterant allegedly added to computer dusters was not capable of coming out of the can in sufficient quantity to prevent inhalation abuse and was ineffective in its stated purpose of being a deterrent to intentional inhalation;
- j. whether Defendants knew or should have known that a significant portion of consumers cannot detect the bitterant allegedly added to computer dusters;
- k. whether Defendant knew or should have known that the bitterant allegedly added to computer dusters was a bronchodilator; and
- l. whether Defendants knew or should have known that the allegedly added to computer dusters made intentionally inhaling their products more dangerous.

167. Numerosity (Rule 23(a)(1)). The Class is so numerous that joinder of individual members herein is impracticable. The exact number of members of the Class, as herein identified and described, is not known, but upon information and belief, hundreds of individuals have died in Missouri because of DFE intoxication or DFE inhalation arising from DFE-based aerosol dusters.

168. Commonality (Rule 23 (a)(2)). Common questions of fact and law exist for each cause of action and predominate over questions affecting only individual Class members, including the following:

- a. whether Defendants engaged in the conduct alleged herein;
- b. whether Defendants knew or should have known that computer dusters posed health risks;
- c. whether Defendants knew or should have known that computer dusters were frequently used by purchasers with the intent to get high;
- d. whether Defendants knew or should have known that inhaling computer dusters was a foreseeable use of the product;
- e. whether Defendants knew or should have known that inhaling computer dusters could lead to addiction, inhalant use disorder, injury, or death;
- f. whether Defendants knew or should have known that the bitterant allegedly added to computer dusters was ineffective in its stated purpose of being a deterrent to inhalant use;
- g. whether Defendants knew or should have known that the bitterant it allegedly added to computer dusters was ineffective in its stated purpose of being a deterrent to intentional inhalation;
- h. whether Defendant negligently warned by stating “SAFETY BITTERANT ADDED to help discourage inhalant abuse” or providing similar warranties on their cans of computer dusters;
- i. whether Defendant knew or should have known that the bitterant allegedly added to computer dusters was not capable of coming out of the can in sufficient

quantity to prevent inhalation abuse and was ineffective in its stated purpose of being a deterrent to intentional inhalation;

- j. whether Defendant knew or should have known that a significant portion of consumers cannot detect the bitterant allegedly added to computer dusters;
- k. whether Defendants knew or should have known that the bitterant allegedly added to computer dusters was a bronchodilator;
- l. whether Defendants knew or should have known that the bitterant allegedly added to computer dusters made intentionally inhaling their products more dangerous;
- m. whether Defendants wrongfully represented that the bitterant allegedly added to computer dusters could in fact be detected by inhalant abusers and, thus, operate to deter use;
- n. whether Defendants placed computer dusters into the stream of commerce in a defective and/or unreasonably dangerous manner;
- o. whether Defendants negligently designed computer dusters by adding DB as a bitterant and adding an insufficient quantity of bitterant;
- p. whether Defendants negligently manufactured computer dusters;
- q. whether Defendants negligently failed to warn that intentionally inhaling DFE was extremely addictive which increased the risk of injury or death;
- r. whether Defendants negligently warned consumers by stating that the bitterant was added to discourage abuse or by including similar language on the computer dusters; and

s. whether Plaintiff and members of the Class are entitled to actual, statutory, and punitive damages.

169. Typicality (Rule 23(a)(3)). Plaintiff's claims are typical of the claims of the other members of the proposed Class. Plaintiff and members of the Class (as applicable) suffered injuries because of Defendants' wrongful conduct that is uniform across the Class.

170. Adequacy (Rule 23(a)(4)). Plaintiff's interests are aligned with the Class she seeks to represent. Plaintiff has and will continue to fairly and adequately represent and protect the interests of the Class. Plaintiff has retained competent counsel highly experienced in complex litigation and class actions and the types of claims at issue in this litigation, with the necessary resources committed to protecting the interest of the Class. Plaintiff has no interest that is antagonistic to those of the Class, and Defendants have no defenses unique to Plaintiff. Plaintiff and her counsel are committed to vigorously prosecuting this action on behalf of the members of the Class. Neither Plaintiff nor Plaintiff's counsel have any interest adverse to those of the other members of the Class.

171. Superiority. This class action is appropriate for certification because class proceedings are superior to other available methods for the fair and efficient adjudication of this controversy, and joinder of all members of the Class is impracticable. The prosecution of separate actions by individual members of the Class would impose heavy burdens upon the Courts and Defendants, would create a risk of inconsistent or varying adjudications of the questions of law and fact common to members of the Class, and would be dispositive of the interest of the other members not parties to the individual adjudications or would substantially impair or impede their ability to protect their interests. Class treatment will create economies of time, effort, and expense and promote uniform decision-making.

172. Manageability. This proposed class action presents fewer management difficulties than individual litigation, and provides the benefits of single adjudication, economies of scale, and comprehensive supervision by a single court.

173. Class certification on the defined issues, therefore, is appropriate under Fed. R. Civ. P. 23(b)(3) because the above common questions of law or fact predominate over any questions affecting individual members of the Class, and a class action is superior to other available methods for the fair and efficient adjudication of this controversy.

VI. CLAIMS FOR RELIEF

COUNT I: STRICT PRODUCTS LIABILITY – DESIGN DEFECT Against all Defendants

174. Plaintiff realleges and incorporates by reference the foregoing allegations as if fully set forth herein.

175. Plaintiff brings this claim for strict liability pursuant to Mo. Rev. Stat. § 537.760.

176. Defendants all transferred the products at issue in this case in the course of their business.

177. Jonathan Kendrick used Defendants' products in a manner reasonably anticipated by Defendants.

178. At all times relevant herein, Defendants' computer dusters were in substantially the same condition as when they left Defendants' control.

179. Defendants' computer dusters possessed numerous design defects that rendered them unreasonably dangerous when put to a reasonably anticipated use.

180. The danger posed by Defendant Norazza's computer duster products went beyond that which would be contemplated by a consumer with ordinary knowledge common to the

community as to its characteristics. Alternatively, the benefits of the design are outweighed by the design's inherent risk of danger.

181. Defendants knew or should have known by reasonable care of the defects described in the factual allegations.

182. For example, DFE is a highly addictive and dangerous chemical which is unfit to be sold in a consumer product. Each can of computer duster was comprised of 99.9% DFE, a dangerous refrigerant which is highly addictive and creates intense euphoria when intentionally inhaled or “huffed.”

183. The inclusion of DFE, a highly addictive substance, within computer dusters which are generally sold over-the-counter and can be obtained in bulk at big-box and small retailers including local hardware, office supply, and grocery stores constitutes a design defect that renders the products unreasonably dangerous to individuals.

184. DFE effects the brain after an individual begins to engage in intentional inhalation because it is lipophilic (meaning it dissolves in liquids or fats), crosses the blood-brain barrier, affects the central nervous system, stimulates neurotransmitter GABA receptors, and inhibits NMDA receptors all of which combine to create an intense high with a depressant effect, euphoria, loss of coordination, motor control and consciousness.⁹⁷

185. Based on publicly available data from verifiable sources such as the National Poison Data System (a data warehouse for the 55 poison control centers across the U.S.), the National Electronic Injury Surveillance System (“NEISS”) (a database managed by the U.S. Consumer Product Safety Commission which catalogs injuries treated at a broad sampling of

⁹⁷ See Chart: Causal Explanation from Case Reports of Intoxication from DFE and citations thereto, *supra* ¶ 87, notes 32–38.

hospital emergency departments), and the National Survey of Drug Use and Health (an annual survey conducted in all 50 states which is an authoritative source for epidemiological data on tobacco, alcohol and drug use, mental health, and other health-related issues in the U.S.), intentionally inhaling computer dusters is increasing *exponentially* in terms of frequency, and results in significant numbers of injuries and fatalities on an annual basis. According to the NEISS hospital record database, computer dusters accounted for more ER visits than any other category of inhalant with 16,927 such visits during the period 2011-2018.⁹⁸ Moreover, since 2015, 2.5 million people have reported misusing computer dusters⁹⁹ and, between 2006-2022, at least 2,316 people have died from DFE inhalation.¹⁰⁰ Also, the total cost to society of injuries and deaths from aerosol duster abuse “stands at over \$1 billion per year.”¹⁰¹

186. Defendants were aware that intentional inhalation is a common and foreseeable use of their computer duster products and of the risks posed by this foreseeable use.

187. Defendants are also aware that DFE has addictive properties and increases the risk of intentional inhalation.

188. Defendants did not add DB, the bitterant, in a proper quantity or manner to deter intentional inhalation. Ostensibly to deter the foreseeable use of intentional inhalation, Defendants re-designed the computer dusters at issue to add the bitterant DB. Defendants included the bitterant

⁹⁸ Forrester, *supra* note 9, at 180–83.

⁹⁹ See discussion *supra* Section IV.B.1.

¹⁰⁰ U.S. CONSUMER PROD. SAFETY COMM’N, STAFF BRIEFING PACKAGE – AEROSOL DUSTER PETITION, July 26, 2023, at OS 72, https://www.cpsc.gov/s3fs-public/Petition-Requesting-Rulemaking-to-Establish-Safety-Standard-for-Aerosol-Duster-Products-Petition-CP-21-1.pdf?VersionId=.NohA6DG6WsXh_tsjhGuA7RuqMCOvxSW.

¹⁰¹ See also U.S. CONSUMER PROD. SAFETY COMM’N, STATEMENT FROM COMMISSIONER RICH TRUMKA, JR., Aug. 2, 2023, https://www.cpsc.gov/s3fs-public/RCAPetitionRequestingRulemakingtoEstablishSafetyStandardforAerosolDusterProductsPetitionCP21_1.pdf?VersionId=nQcgEM4wvCJE97zmhwYCdAkwuluYerIt.

under pressure from their retail partners who began refusing to sell dusters without bitterant in their stores.¹⁰²

189. Each of the computer dusters contain approximately .01% of the bitterant DB.

190. Defendants all followed the same patented procedure pertaining to addition of bitterant as other manufacturers of computer dusters. Specifically, DB is added in a solid form to the liquified DFE gas aerosol at a target quantity of 5 to 50 parts per million (ppm). DB is dissolved in the liquified DFE gas aerosol and theoretically is intended to mix evenly throughout the can so it may be expressed from the can in the same concentration.¹⁰³ However, when pressurized and expressed from the can, DB is not present in a sufficient quantity to be detectable, much less aversively bitter.

191. Defendants affixed labeling to the computer dusters cans at issue which warranted that a bitterant was added to “help discourage inhalant abuse,” or similar language warranting that the bitterant was safe and had a deterrent effect to prevent intentional inhalation.

192. The DB formulation used by Defendants in the design of their computer dusters is neither safe nor does it have the intended and warranted deterrent effects to prevent use as an inhalant as evidenced by the fact that the incidence of intentional inhalation has increased exponentially since bitterant was added to the computer dusters.

193. Additionally, the selection of DB as a bitterant is problematic because a significant percentage of people cannot taste it in any quantity. Namely, DB is among the class of bitter compounds which cannot be detected by approximately 15-30% of the adult population. These

¹⁰² See discussion *supra* Section IV.E.

¹⁰³ See DB Formula Patent, *supra* note 79.

individuals lack a genetic trait which allows them to taste the bitter properties of certain “propylthiourea derivatives.”¹⁰⁴

194. Due to DB’s reduced effectiveness as a deterrent in all cases and its complete ineffectiveness in a large subsection of the population, its inclusion as a safety feature is a design defect.

195. The bitterant chosen by Defendant Norazza, DB, also increases the risk of inhalation of DFE. In addition to the other design flaws described above, DB is a “bronchodilator” that operates to relax the muscles in the lungs. Similar to the effect of an asthma inhaler, DB operates to widen a person’s airway upon being inhaled. This is the opposite of the desired effect and renders DB unsafe.

196. As a result, users who inhale the contents emitted from the computer dusters may breathe in a greater quantity of DFE than if the bitterant were not included at all.

197. As a direct, substantial, and proximate result of the design defects, users like Jonathan Kendrick, were at an increased risk of becoming addicted to DFE (than if another less or non-addictive substance was used), at an increased risk of inhaling more DFE (than if the bitterant was effective or not included at all), and ultimately at an increased risk of suffering addiction, injury, and/or death by using Defendants’ products in the foreseeable manner of intentional inhalation.

198. As a direct, substantial, and proximate result of the design defects, Jonathan Kendrick became addicted to DFE, suffered serious bodily injury, and died due to using Defendants’ defectively designed products in a reasonably anticipated manner.

¹⁰⁴ See U.S. CONSUMER PROD. SAFETY COMM’N, FINAL REPORT: STUDY OF AVERSIVE AGENTS (1992); see also *Alcohol Denat. Final Report*, *supra* note 85.

199. Plaintiff and the members of the Class seek the full measure of relief as provided under the law, including damages for pecuniary and non-pecuniary losses, attorneys' fees and costs, and any other relief this Court deems just and proper.

COUNT II: STRICT PRODUCTS LIABILITY – FAILURE TO WARN
Against all Defendants

200. Plaintiff realleges and incorporates by reference the foregoing allegations as if fully set forth herein.

201. Plaintiff brings this claim for strict liability pursuant to Mo. Rev. Stat. § 537.760.

202. Defendants all transferred the products at issue in this case in the course of their business.

203. Jonathan Kendrick used Defendants' products in a manner reasonably anticipated by Defendants.

204. At all times relevant herein, Defendants' computer dusters were in substantially the same condition as when they left Defendants' control.

205. At the time of sale, Defendants' computer dusters were defective and unreasonably dangerous because the computer duster products were unreasonably dangerous when put to a reasonably anticipated use without knowledge of the products' characteristics. Plaintiff was damaged as a direct result of the products being sold without an adequate warning.

206. Defendants' warnings did not adequately warn of: (1) the known high risk of addiction from the primary ingredient, DFE, accompanied by the risk of withdrawal psychosis; (2) the specific injuries that can result from intentional inhalation including permanent brain damage, cardiac arrest, sudden suffocating death, skeletal fluorosis, psychosis, kidney and liver damage, and involuntary passing of urine and feces; (3) the risk of death in a clear and effective manner; (4) failed to warn that DB was not added in a quantity or manner that would have a

deterrent effect, (5) failed to warn that DB is undetectable to a broad swath of the population in any quantity, and (6) failed to warn that the bitterant DB has a dilating effect on the respiratory system, which can lead to increased inhalation of DFE, a highly volatile and addictive substance. The general warnings provided by Defendants were cancelled out by reassuring consumers that its products were designed to prevent abuse. The inadequate warning included both missing warnings and deficient warnings. Additionally, the warnings that were present were not presented in a manner that would have alerted an ordinary user of the danger.

207. Defendants knew or should have known by exercising reasonable care of the defects described herein and the attendant risks they posed to consumers and users.

208. Defendants had a duty to warn users about these risks.

209. Each can of computer duster at issue in this case was comprised of 99.9% DFE, a dangerous refrigerant which is highly addictive and can create a euphoric sensation when intentionally inhaled.

210. DFE is a volatile substance that stimulates a neuro-chemical reaction that produces euphoria and, with repeated or prolonged use, can cause injury or death and abrupt cessation can induce withdrawal. DFE effects the brain after an individual begins to engage in intentional inhalation because it is lipophilic (meaning it dissolves in liquids or fats), crosses the blood-brain barrier, affects the central nervous system, stimulates GABA receptors, and inhibits NMDA receptors all of which combine to create an intense high with a depressant effect, euphoria, loss of coordination, motor control and consciousness.¹⁰⁵

¹⁰⁵ See Chart: Causal Explanation from Case Reports of Intoxication from DFE and citations thereto, *supra* ¶ 87, notes 32–38.

211. Defendants knew or should have known of the risks associated with exposure to DFE, including the risk of including the risk of permanent brain damage, cardiac arrest, sudden suffocating death, skeletal fluorosis, psychosis, kidney and liver damage, involuntary passing of urine and feces, and death as well as the high risk that users could become addicted to inhaling DFE.

212. Despite ample publicly available scientific data on the addictive nature of DFE, Defendants failed to warn of this inherent risk, danger, or hazard in their computer duster products. This failure to warn renders these computer dusters unreasonably dangerous.

213. Defendants also failed to warn that the bitterant DB was not added in a quantity or in a manner that could ever have a deterrent effect on individuals engaged in the foreseeable intentional inhalation.

214. Defendants are aware or should have been aware that, in order to be minimally effective as a deterrent, DB must be added to computer duster cans in a quantity sufficient to be aversively bitter to human taste. Also, even if added to the cans at the minimum threshold level, DB must convert to the gas phase and be expressed from the cans at the same minimum threshold level to achieve a deterrent effect. Yet, the bitterant DB was neither added to the can nor capable of being expressed from the can in sufficient quantities to be detectable much less aversively bitter.

215. Defendants failed to warn that the bitterant DB is among a class of compounds which a broad swath of the population cannot taste in any quantity. The ability to detect the bitter taste of DB is a genetic trait which many individuals lack. Defendants knew or should have known that this renders DB an ineffective and unsafe choice of bitterant.

216. Defendants also failed to warn that the bitterant DB is a bronchodilator that operates to relax the muscles in the lungs and to widen a person's airway when inhaled, similar to the effect

of an asthma inhaler, thereby increasing the risk of harmful levels of DFE and increasing the risk a user will become addicted to the substance—the opposite of the purported deterrent effect.

217. These failures to warn rendered Defendants' computer dusters defective and unreasonably dangerous under Mo. Rev. Stat. § 537.760.

218. Jonathan Kendrick and members of the Class were not adequately warned by the Defendants of the inherent risks, dangers, or hazards of becoming addicted to, developing inhalant abuse disorder, becoming injured, or dying from DFE.

219. Jonathan Kendrick and members of the Class were not adequately warned that: (1) DB could not deter them from intentional inhalation, (2) they may have been among the group of individuals unable to taste DB, and (3) they could inhale a deadly quantity of DFE from the computer dusters at issue due to the presence of DB.

220. As a direct, substantial, and proximate result, Jonathan Kendrick suffered addiction, physical injuries, and died.

221. Jonathan Kendrick's and the class's use of Defendants' computer duster products for intentional inhalation was reasonably and objectively foreseeable. Indeed, Defendants were well aware that its products were being used in this manner well before Jonathan Kendrick ever purchased a can of computer dusters.

222. Plaintiff and members of the Class seek the full measure of relief as provided under the law, including damages for pecuniary and non-pecuniary losses, attorneys' fees and costs, and any other relief this Court deems just and proper.

COUNT III: STRICT PRODUCTS LIABILITY –MANUFACTURING DEFECT
Against all Defendants

223. Plaintiff realleges and incorporates by reference the foregoing allegations as if fully set forth herein.

224. Plaintiff brings this claim for strict liability pursuant to Mo. Rev. Stat. § 537.760.

225. Defendants all transferred the products at issue in this case in the course of their business.

226. Jonathan Kendrick used Defendants' products in a manner reasonably anticipated by Defendants.

227. At all times relevant herein, Defendants' computer dusters were in substantially the same condition as when they left Defendants' control.

228. Defendants' computer dusters possessed manufacturing defects that rendered them unreasonably dangerous when put to a reasonably anticipated use.

229. The aforementioned computer duster products at issue in this case were defective, unreasonably dangerous, not merchantable, and not reasonably suited for the use intended in that they were manufactured in such a manner that in reasonably foreseeable usage, the user would suffer harm and/or death. Such defects were unreasonably dangerous and ultimately proximately caused and/or contributed to damages including, but not limited to, the resultant death of Jonathan Kendrick and injury and death to thousands of other users.

230. Defendants manufactured or had sufficient input into the making of the computer dusters to subject them to liability under this count and sold said computer dusters as a new product. The defects existed at the time the computer dusters left Defendants' control. Such defects proximately caused and/or contributed to the resultant death of Jonathan Kendrick and injury and death to thousands of other users.

231. At all times relevant herein, Defendants' products were not altered in any material way since the time they left Defendants' control.

232. At the time of their sale and/or use, Defendants' computer dusters possessed numerous latent manufacturing defects that made them not in their intended condition as evaluated against the patent. The manufacturing defect rendered them unreasonably dangerous to an extent beyond which would be contemplated by a consumer with ordinary knowledge common to the community as to its characteristics.

233. Defendants' products do not contain the amount of bitterant called for in the patented design. Thus, in the gas phase, the concentration of DB is far below a level which would be detectable and nowhere near the level that could deter intentional inhalation.

234. Defendants manufactured the computer dusters in such a way that the levels of DB present in an individual computer duster can vary significantly.

235. Independent testing shows wild fluctuations in the amount of DB inside the cans despite patented formulation amounts. For example, only trace amounts of DB were present in the gas phase of the Ultra Duster cans, and zero DB was present in the gas phase of the Dust Off, Endust, and Surf onn. cans. Because Inland Air Duster and Office Depot duster and other brands are manufactured following the same process, these cans also exhibit the same manufacturing issues. These variations are a flaw in the manufacturing process and a deviation from Defendants' design specifications.

236. These levels are less than the recognized level at which a bitterant would be detectable to humans.

237. Despite these fluctuations, Defendants failed to ensure that their products were manufactured to meet the patented formulation.

238. Defendants failed to adequately test manufactured products to determine if the bitterant they advertise as being safe and a deterrent was added in a proper manner to perform as

warranted, specifically to “discourage inhalant abuse” and/or Defendants intentionally failed to add the proper amount of bitterant to cut costs and increase profits.

239. The manufacture of Defendants’ computer dusters does not have the intended and warranted deterrent effects to prevent use of their products for intentional inhalation as evidenced in part by the fact that the incidence of intentional inhalation has increased exponentially since bitterant was added to the dusters.

240. Defendants knew or should have reasonably known that these variations in amounts of DB in final products could lead to inhalant addiction, inhalant abuse disorder and, ultimately, death and concealed the same.

241. Due to these manufacturing defects, Defendants’ products, when sold, were not merchantable and reasonably suited for their intended use.

242. The defective products at issue were the proximate cause of Jonathan’s addiction, injury, and untimely death.

243. Defendants knew or should have reasonably known by exercising reasonable and/or ordinary care of the defects described herein and the attendant risks they posed to consumers and users and concealed the same.

244. As a direct and proximate result of the aforementioned manufacturing defects, Plaintiff and members of the Class have suffered damages including, but not limited to, special, general, pecuniary and other damages.

COUNT IV: NEGLIGENCE
Against all Defendants

245. Plaintiff realleges and incorporates by reference the foregoing allegations as if fully set forth herein.

246. At all material and relevant times, Defendants had a duty to exercise reasonable care in the design, research, formulation, manufacture, production, marketing, testing, supply, promotion, packaging, sale, distribution, and/or monitoring of their computer duster products, including a duty to assure that the product would not cause foreseeable injuries through foreseeable intentional inhalation.

247. At all material and relevant times, Defendants' conduct, acts, and omissions were negligent and wrongful.

248. Defendants utilized the volatile chemical compound DFE as the primary substance in its computer dusters, despite its known addictive properties.

249. DFE is a highly addictive, volatile substance that stimulates a neuro-chemical reaction that produces euphoria and with repeated or prolonged use can cause injury or death and abrupt cessation can induce withdrawal. DFE effects the brain after an individual begins to engage in huffing because it is lipophilic (meaning it dissolves in liquids or fats), crosses the blood-brain barrier, affects the central nervous system, stimulates GABA receptors, and inhibits NMDA receptors all of which combine to create an intense high with a depressant effect, euphoria, loss of coordination, motor control and consciousness.

250. By defectively formulating, testing, researching, designing, manufacturing, producing, marketing, supplying, promoting, packaging, selling, distributing, labeling, and monitoring a product that utilizes a highly addictive chemical compound known to encourage misuse and cause injury, including death, Defendants breached the standard of care owed to consumers and users of their products.

251. Further, Defendants assumed a voluntary and additional duty to make their computer dusters "safe" by adding a substance, DB, to the duster cans as a bitterant, purportedly

to deter inhaling abuse. Yet, Defendants failed to add DB in the proper quantity and manner to render DFE aversively bitter.

252. Each computer duster can consists of approximately .01% of the bitterant DB.

253. Defendants all followed the same patented procedure to add DB to each of the brands of computer duster at issue in this case. In the gas phase, the concentration of DB is far below a level which would be detectable and nowhere near the level that would prevent intentional inhalation.

254. Specifically, according to the patent that Defendants allegedly followed, DB is added in a solid form to the liquified DFE gas aerosol at a target quantity of 5 to 50 parts per million (ppm). DB is dissolved in the liquified DFE gas aerosol and theoretically is intended to mix evenly throughout the can.

255. However, when placed under pressure and expressed from the can, DFE and the small quantity of the bitterant DB are converted to a gas vapor. Pursuant to the patented design for addition of the bitterant, in the gas phase the concentration of DB is only 50 to 500 ppb.

256. At 50 to 500 ppb, the concentration of DB is at best *recognizably* bitter but does not rise to the level of being *aversively* bitter, which is the scientifically-validated threshold at which DB would deter intentional inhalation.

257. Defendants do not add the amount of bitterant called for in the patented design. Thus, in the gas phase, the concentration of DB is far below a level which would be detectable and nowhere near the level that would deter intentional inhalation.

258. The DB formula concentration used by Defendants in the design and manufacture of their computer dusters does not have the intended and warranted deterrent effects to prevent

misuse as evidenced in part by the fact that the incidence of huffing has increased exponentially since bitterant was added to the dusters.

259. Further, DB is an ineffective choice of bitterant. Namely, DB is among the class of bitter compounds which cannot be detected by approximately 15-30% of the adult population. These individuals lack a genetic trait which allows them to taste the bitter properties of certain “propylthiourea derivatives.”¹⁰⁶

260. DB is not only ineffective as a deterrent to intentional inhalation, but actually increases the risk and amount of DFE inhalation.

261. DB is a “bronchodilator” that operates to relax the muscles in the lungs and to widen a person’s airway upon being inhaled, similar to the effect of an asthma inhaler, thereby increasing the risk a user will become addicted to DFE and increasing the risk of inhaling a deadly quantity of the substance. Defendants therefore failed to exercise reasonable care in making the warranted safety modifications; instead, it made the computer dusters less safe and therefore breached their voluntarily assumed duty.

262. Defendants relied on the fact that computer dusters were widely misused in order to maintain and/or enhance sales of computer dusters.

263. Defendants failed to exercise reasonable care in designing, manufacturing, testing, researching, formulating, marketing, promoting, packaging, labeling, assembling, selling, distributing, and monitoring their products.

¹⁰⁶ See U.S. CONSUMER PROD. SAFETY COMM’N, FINAL REPORT: STUDY OF AVERSIVE AGENTS, (1992); see also *Alcohol Denat. Final Report*, *supra* note 85.

264. Defendants had a duty to exercise reasonable care to prevent their products from being unreasonably dangerous by providing adequate warnings on their products that are clear, correct, and conspicuous to consumers and users.

265. At the time of sale, Defendants breached their duty because their computer duster products did not adequately warn users of foreseeable and latent dangers related to the foreseeable use of the products because the products failed to warn: (1) of the known high risk of addiction from the primary ingredient, DFE, accompanied by the risk of withdrawal psychosis; (2) of the specific injuries at risk including permanent brain damage, cardiac arrest, sudden suffocating death, skeletal fluorosis, psychosis, kidney and liver damage, and involuntary passing of urine and feces; (3) clearly the risk of death; (4) that DB was not added in a quantity or manner that would have a deterrent effect; (5) that DB is undetectable to a broad swath of the population in any quantity; (6) that the bitterant DB has a dilating effect on the respiratory system, which can lead to increased inhalation of DFE, a highly volatile and addictive substance. The general warnings provided by Defendants were cancelled out by reassuring consumers that their products were designed to prevent abuse. Additionally, the warnings that were present were not presented in a manner that would have alerted an ordinary user of the danger.

266. Defendants knew or should have known by exercising reasonable care of the foregoing defects described herein and the attendant risks they posed to users.

267. Defendants had a duty to warn users about these risks.

268. Each can of computer duster at issue in this case was comprised of 99.9% DFE, a dangerous refrigerant which is highly addictive and can create a euphoric sensation when intentionally inhaled.

269. DFE is a volatile substance that stimulates a neuro-chemical reaction that produces euphoria and with repeated or prolonged use can cause injury or death and abrupt cessation can induce withdrawal. DFE effects the brain after an individual begins to engage in intentional inhalation because it is lipophilic (meaning it dissolves in liquids or fats), crosses the blood-brain barrier, affects the central nervous system, stimulates GABA receptors, and inhibits NMDA receptors all of which combine to create an intense high with a depressant effect, euphoria, loss of coordination, motor control and consciousness.

270. Defendants knew or should have known of the risks associated with exposure to DFE, including the risk of permanent brain damage, cardiac arrest, sudden suffocating death, skeletal fluorosis, psychosis, kidney and liver damage, involuntary passing of urine and feces, and death as well as the high risk that users could become addicted to inhaling DFE.

271. DB is ineffective as a bitterant. Defendants all followed the same patented procedure to add DB to each of the aforementioned brands of computer duster at issue in this case. Specifically, DB is added in a solid form at a target quantity of 5 to 50 ppm. DB is dissolved in the liquified gas aerosol and theoretically is intended to mix evenly throughout the can and be expressed from the can in an amount which makes DFE aversively bitter. However, in the gas phase, the concentration of DB is far below this level and nowhere near the level that could potentially deter intentional inhalation.

272. Defendants failed to warn that the bitterant DB is among a class of bitter compounds which cannot be detected by approximately 15-30% of the population. Selection of DB as a bitterant despite its ineffectiveness in a large subsection of the population constitutes negligence.

273. Defendants also failed to warn that the bitterant DB is a “bronchodilator” that operates to relax the muscles in the lungs and to widen a person’s airway upon being inhaled, similar to the effect of an asthma inhaler, thereby increasing the risk a user will become addicted to DFE and increasing the risk of inhaling a deadly quantity of the substance—the opposite of the purported deterrent effect.

274. Defendants failed to warn ordinary users, including Jonathan Kendrick, about the addictive properties of DFE, failed to warn that DB was ineffective as a bitterant in the quantity and manner it was added to the computer dusters, failed to warn that he may have been unable to taste DB, and failed to warn of the increased risk of DFE inhalation due to the dilating effects that DB has on the respiratory system.

275. These failures to warn as well as the inadequate warnings rendered Defendants’ computer dusters defective and unreasonably dangerous.

276. The negligent and wrongful acts and omissions of Defendants as alleged herein had a substantial part in bringing about Jonathan Kendrick’s addiction, injuries, and death.

277. At all material and relevant times, Defendants’ carelessness and negligence were a substantial, direct, and proximate cause of Jonathan Kendrick’s addiction, injuries, and death and the resulting damages to him and his family.

278. Plaintiff and members of the Class seek the full measure of relief as provided under the law, including damages for pecuniary and non-pecuniary losses, attorneys’ fees and costs, and any other relief this Court deems just and proper.

COUNT V: NEGLIGENCE

Against Walmart Defendants, Office Depot Defendants, and Micro Center Defendants

279. Plaintiff realleges and incorporates by reference the foregoing allegations as if fully set forth herein.

280. Walmart Defendants, Office Depot Defendants, and Micro Center Defendants did not act as a reasonably prudent retailer, because a reasonably prudent retailer would have kept reasonably familiar with news events and stories, scientific studies, and other reliable information concerning the foreseeable misuse of the products at issue in this case. Walmart Defendants were aware as early as 2008 that people misused and abused duster products. It also became aware that DB was not deterring abuse because it could not be expelled from the can in a sufficient quantity to be aversively bitter, could not be detected at all by a significant number of individual abusers, and increased the risk presented by huffing due to its bronchodilative effect and concealed the same.

281. Despite this knowledge, Walmart Defendants, Office Depot Defendants, and Micro Center Defendants continued to sell, market, promote, and distribute computer duster products in multi-packs and in prominent displays. Walmart Defendants, Office Depot Defendants, and Micro Center Defendants also turned a blind eye on individuals, like Jonathan Kendrick and other members of the Class, who made multiple purchases of multi-cans during short periods.

282. Micro Center Defendants never took steps to meaningfully restrict the availability of computer dusters in its store or track and monitor incidents involving computer dusters. Micro Center Defendants are able to track individual user purchases through personal accounts.

283. From August 14, 2021, till the end of the year, Jonathan made 43 purchases of computer dusters totaling more than \$1,300 (before sales tax) at Micro Center. In September, he made eight trips to Micro Center, two on the 25th which started a four-day streak of purchases. In October 2021, Jonathan bought computer dusters nine separate times at Micro Center, including a three-day and a four-day consecutive streak. In November, he again visited Micro Center nine times to buy computer dusters. In December 2021, he made a total of 17 trips, two on the 4th and

28th which both started separate three-day streaks of purchases. Jonathan also had a six-day streak of purchases in December. In the days preceding Jonathan's death on September 25, 2022, he purchased computer dusters from Micro Center the day before and the day of his death.

284. Micro Center Defendants displayed computer duster multipacks in prominent check out aisle and end-cap space.



285. Office Depot Defendants never took steps to meaningfully restrict the availability of computer dusters in its store or track and monitor incidents involving computer dusters. Indeed, to the contrary, Office Depot Defendants would frequently offer Jonathan Kendrick special, personalized “Instant Savings” deals on computer dusters of almost 25% to encourage his purchase

of their Office Depot private labeled products further fueling his addiction, injuries, and ultimately death. Office Depot Defendants are able to track individual user purchases through personal rewards accounts.

286. In 2019, Jonathan made 93 trips to Office Depot to purchase computer dusters and spent more than \$2,100 (after Instant Savings was applied and before sales tax) on these products. That year, there were 16 times Jonathan made two trips to Office Depot on the same day to buy computer dusters and were many consecutive day streaks. In 2019, Jonathan saved more than \$280 on computer dusters because of Office Depot's Instant Savings deals. In 2020, Jonathan went to Office Depot 33 times to buy more than \$1,200 (before sales tax) in computer dusters, 14 of those purchases took place in March. He had two separate six-day consecutive streaks of purchases in 2020, one in January and one in March which included a day with two purchases. In 2021, Jonathan purchased computer dusters 17 times at Office Depot, costing him more than \$740 (before sales tax). In 2022, he bought more than \$670 (before sales tax) in computer dusters during 16 separate trips. In May 2022, Jonathan had a four-day consecutive streak of purchases, but this streak included seven purchases because he made two purchases on three of the four days. In the days preceding Jonathan's death on September 25, 2022, he made two trips to Office Depot the day before, both in the afternoon.

287. Office Depot displayed their multipacks in prominent end-cap space.



288. Walmart Defendants never took steps to meaningfully restrict the availability of computer dusters in its store or track and monitor incidents involving computer dusters.

289. Walmart Defendants displayed their multipacks in prominent end-cap space.



290. The negligent and wrongful acts and omissions of Defendants as alleged herein had a substantial part in bringing about Jonathan Kendrick's addiction, injuries, and death.

291. At all material and relevant times, Defendants' carelessness and negligence were a substantial, direct, and proximate cause of Jonathan Kendrick's addiction, injuries, and death and the resulting damages to him and his family.

292. Plaintiff and members of the Class seek the full measure of relief as provided under the law, including damages for pecuniary and non-pecuniary losses, attorneys' fees and costs, and any other relief this Court deems just and proper.

COUNT VI: WRONGFUL DEATH
Against all Defendants

293. Plaintiff realleges and incorporates by reference the foregoing allegations as if fully set forth herein.

294. Plaintiff is the father of the deceased, Jonathan Kendrick. As such, Plaintiff brings these claims for wrongful death pursuant to Mo. Rev. Stat. § 537.080 *et seq.*

295. As a direct, substantial, and proximate result of Defendants' wrongful acts, set out in Counts I, II, III, IV, VIII, and IX, Jonathan Kendrick was injured and died.

296. Consequently, Plaintiff has suffered damages in the form of pecuniary and nonpecuniary losses by reason of these deaths which are attributable to the defective design of Defendants' products and Defendants' failure to warn of certain risks associated with their products, as described in this Complaint. These damages incurred by Plaintiff include but are not limited to: (1) pecuniary losses suffered by reason of the death, funeral expenses, and the reasonable value of the services, consortium and companionship (including the physical, emotional, and psychological relationship between the parent and the child), comfort, instruction, guidance, counsel, training, and support of which those on whose behalf suit may be brought have

been deprived by reason of such death; (2) damages as the deceased may have suffered between the time of injury and the time of death and for the recovery of which the deceased might have maintained an action had death not ensued.

297. Plaintiff shall be entitled to an award of aggravating circumstances damages because Defendants' conduct was knowing, intentional, with malice, demonstrated a complete lack of care, and/or was in reckless disregard and complete indifference to the probable consequence of their actions. Because Defendants put their own pecuniary interest ahead of all else, they sacrificed the safety, health, and well-being of users and their families. Defendants also unfairly profited off the creation of a public health crisis. The only way to prevent this type of egregious indifference from occurring again is to assess aggravating circumstances damages against Defendants.

298. Plaintiff seeks all available compensatory relief and aggravating circumstances damages in an amount to be determined at trial and reasonable attorneys' fees and costs.

COUNT VII: SURVIVORSHIP
Against all Defendants

299. Plaintiff realleges and incorporates by reference the foregoing allegations as if fully set forth herein.

300. Plaintiff is the Administrator of the estate of Jonathan Kendrick, having been duly appointed by the District Court of Johnson County, Kansas, Probate Department. Thus, as the personal representative of Jonathan Kendrick's estate, Plaintiff Michael Kendrick brings this claim for survivorship pursuant to Mo. Rev. Stat. 537.020.

301. As a direct, substantial, and proximate result of Defendants' wrongful acts set out in Counts I, II, III, IV, VIII, and IX, Jonathan Kendrick was injured and died. Jonathan Kendrick endured conscious pain and suffering after becoming addicted to Defendants' products until they

later died from difluoroethane toxicity, incurred medical expenses related to hospitalization and rehab treatment for their addiction, and incurred loss of income prior to their untimely deaths.

302. Had he lived, Jonathan Kendrick could have brought an action against Defendants for strict products liability, negligence, and breach of warranty for their injuries described above. Pursuant to the Mo. Rev. Stat. 537.020, recovery for these injuries survive to Plaintiff Kendrick, the legal representatives of Jonathan's estate.

303. Plaintiff Kendrick seeks all available compensatory relief in an amount to be determined at trial and reasonable attorneys' fees and costs.

COUNT VIII: BREACH OF IMPLIED WARRANTY OF MERCHANTABILITY
Against all Defendants

304. Plaintiff realleges and incorporates by reference the foregoing allegations as if fully set forth herein.

305. By operation of law, Defendants impliedly warranted that the computer dusters were of merchantable quality and safe for personal or household use.

306. An implied warranty of merchantability, contained in the U.C.C. § 2-314, has been codified in Missouri under Mo. Rev. Stat. 400.2-314.

307. At the point of sale, the dusters contained inherent design defects that rendered them unsuitable and unsafe for personal or household use.

308. Defendants breached the implied warranty of merchantability in connection with the sale and/or distribution of the computer dusters at issue.

309. As a direct and proximate result of Defendants' breach of implied warranty of merchantability, Plaintiff and members of the Class have sustained damages in an amount to be determined at trial.

COUNT IX: BREACH OF EXPRESS WARRANTY
Against all Defendants

310. Plaintiff realleges and incorporates by reference the foregoing allegations as if fully set forth herein.

311. Defendants made express, written affirmations of fact or promise relating to their computer duster products warranting that the dusters contained a bitterant which deters inhalant abuse. Specifically, Defendants warranted that their dusters contained a bitterant to “help discourage inhalant abuse” or other similar language.

312. Defendants made these express warranties about product safety through websites, packaging and labeling to assuage retailer concern for rising inhalant abuse injuries and deaths and to keep their defective and unreasonably dangerous products on the shelves.

313. In reality, the bitterant DB was not added at a concentration that would be an effective deterrent and was an inappropriate choice of bitterant in the first instance due to the inability of a broad swath of the population to taste it and due to the dilating effects DB has on the respiratory system. DB rendered Norazza’s computer dusters unsafe in direct contradiction to their explicit express warranty.

314. Defendants encouraged retailers to sell their dusters in multi-packs and market them in high visibility end caps without regard for quantity of cans sold, despite knowing that intentional inhalation was a prevalent and entirely foreseeable use of their products, due to the highly addictive nature of DFE, and even though the bitterant DB would not deter such use and could increase the risks of inhalation. Defendants made these marketing decisions directly, for their own benefit, despite their knowledge of the falsity of the respective warnings on their computer dusters.

315. Defendants’ products did not conform to the express warranties made as to product safety.

316. As a direct and proximate result of Defendants' breach of express warranties, Plaintiff and members of the Class have suffered pecuniary and other losses.

317. Plaintiff and members of the Class seek recovery of actual damages of an amount to be determined at trial and any other relief that is deemed proper and just.

COUNT X: PUNITIVE AND/OR AGGRAVATING CIRCUMSTANCES DAMAGES

318. Plaintiff realleges and incorporates by reference the foregoing allegations as if fully set forth herein.

319. Defendants' conduct was knowing, intentional, with malice, demonstrated a complete lack of care, and/or was in reckless disregard and complete indifference to the probable consequence of their actions. Because Defendants put their own pecuniary interest ahead of all else, they sacrificed the safety, health, and well-being of users and their families. Defendants also unfairly profited off the creation of a public health crisis. The only way to prevent this type of egregious indifference from occurring again is to assess aggravating circumstances damages against Defendants.

320. Plaintiff and members of the Class seek the full measure of punitive and/or aggravating circumstances damages against Defendants.

VII. PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays for judgment as follows:

321. An order certifying this action on all counts, and the Class requested herein as an Issue Class Action, designating Plaintiff as the representative of the Missouri Issue Class and appointing Plaintiff's counsel as Class counsel for the Missouri Issue Class;

322. An order declaring that Defendants' actions constitute:

- a. A strict liability design defect;
- b. A strict liability failure to warn;

- c. A strict liability manufacturing defect;
- d. Negligent design;
- e. Negligent failure to warn;
- f. A breach of implied warranty;
- g. A breach of express warranty.

323. A judgment awarding Plaintiff and the Class all compensatory and punitive damages to be determined at trial;

324. A judgment awarding Plaintiff and the Class pre-judgment and post-judgment interest in an amount prescribed by law;

325. A judgment awarding Plaintiff and the Class costs and fees, including attorneys' fees, as prescribed by law; and

326. Grant such other legal, equitable, or further relief as the Court may deem just and proper.

327. Plaintiff requests a trial by jury for all issues so triable.

RESPECTFULLY SUBMITTED, this the 12th day of September.

BY: /s/ Ruth Anne French-Hodson
RUTH ANNE FRENCH-HODSON, MO #65461
REX A. SHARP, MO #51205
SARAH T. BRADSHAW, MO #66276
Sharp Law, LLP
4820 W. 75th St.
Prairie Village, KS 66208
Telephone: (913) 901-0505
Facsimile: (913) 261-7564
rsharp@midwest-law.com
rafrenchhodson@midwest-law.com
sbradshaw@midwest-law.com

Counsel for Plaintiff Michael Kendrick